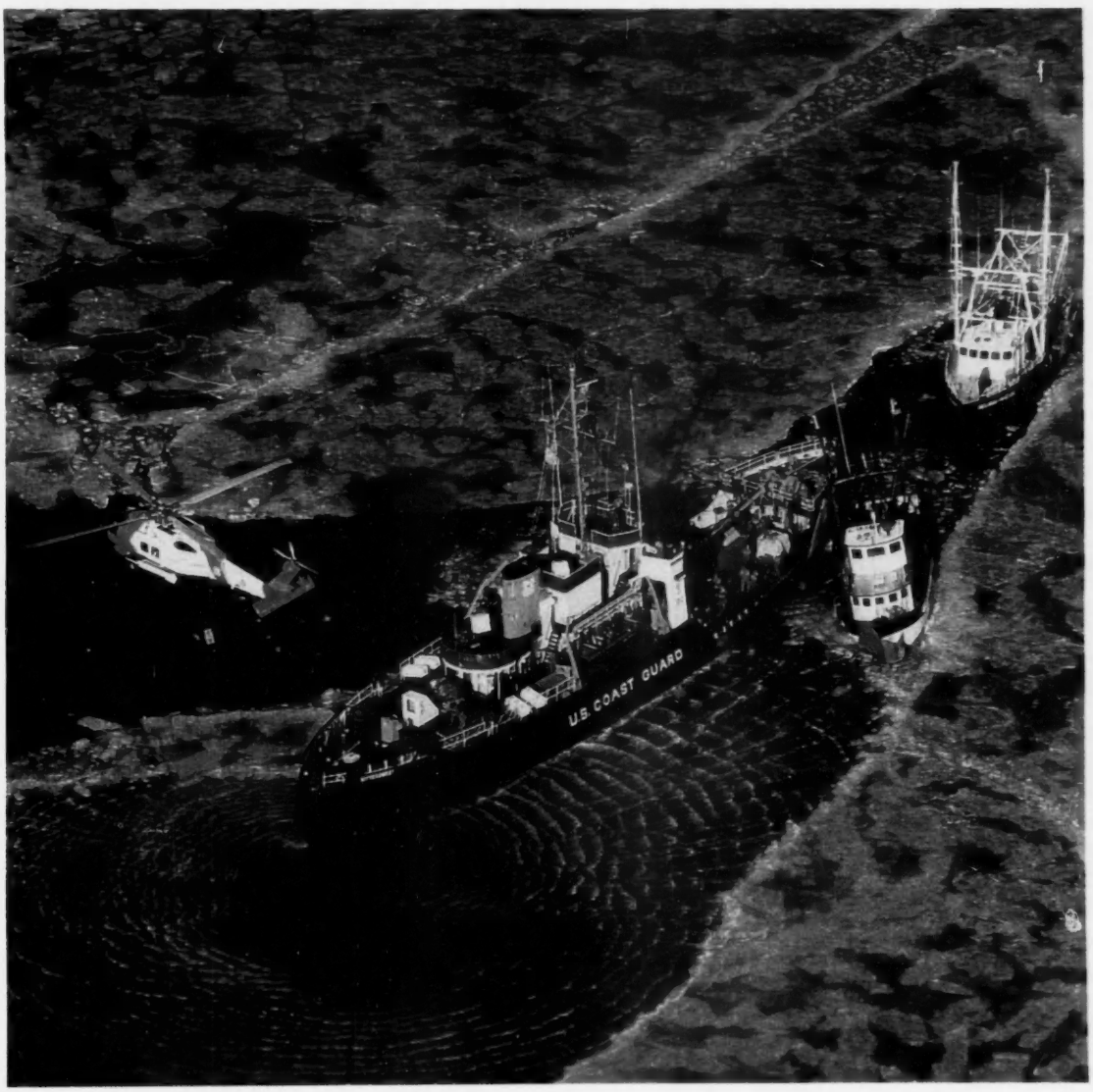
ON SCENE

U.S. Department of Transportation
United States Coast Guard



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CHIEF, OFFICE OF NAVIGATION SAFETY
AND WATERWAY SERVICES
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Dear "On Scene" Readers,

This will be my last opportunity to address the SAR community in this magazine before moving on to become Fifth District Commander. It has been my distinct pleasure to serve as your Program Director for the past three years.

Lest anyone think otherwise, SAR has been and will continue to be a cornerstone program of the U. S. Coast Guard. Having said that, we must avoid complacency and continuously strive to improve our methods and our capabilities. Technology, such as EPIRBS, AMVER, self-locating data marker buoys, digital selective calling, geographic information systems and satellite communications will assist these efforts as will the proper introduction of new platforms such as the 47' MLB, new RIBs and replacements for the 41' UTB and the Coastal Patrol Boat.

However, none of these are as important to the successful prosecution of a SAR case as the inquiring mind or the inquisitive nature exhibited by group or district duty officers ashore, or the coxswain and the boat crew afloat who properly recognize risks and make sound judgements based upon properly assessing each unfolding situation. In the final analysis, it is the human element (ashore and afloat) that ultimately makes the decisions that lead to the successful conclusion of a SAR case.

You make the difference every day through training, readiness, vigilance, commitment and constant improvement. In the SAR business, we should never settle for good enough! Best wishes as you go about your lifesaving endeavors.

Sincerely,

W. J. ECKER
Rear Admiral, U.S. Coast Guard

ON SCENE 1994 ISSUE #1

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RADM William J. Ecker
Chief, Office of Navigation Safety and Waterway Services

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Editor

COVER: *Team Ice Rescue*
(Courtesy of Cape Cod Times)

ON SCENE is a triannual, authorized, special interest publication, produced by the Office of Navigation Safety and Waterway Services for members of the U.S. Coast Guard and the SAR community. Editorial content is not to be considered as authority for official action, nor as record material. Individual views and opinions expressed do not necessarily reflect those of the Department of Transportation or the U. S. Coast Guard.

Letters to the Editor

Dear On Scene Editor:

Bravo Zulu to MK1 Eric Williams who wrote the article on Motor Lifeboat Maintenance (ON SCENE 3/93)

It is time the Coast Guard changes again, back to what it used to have a long time ago. The Coast Guard had Assist Teams under district command. They were responsible for the support and maintenance of boats under 82'.

I worked at the 13th District Assist Team from 1981 to 1986. My job was to overhaul all engines (Detroit Diesels, Cummins, etc.), transmissions and accessories. We also provided training for all motor lifeboat stations in engine tune-up and accessory overhauls (fuel pumps, injectors, etc.). We also traveled to stations that needed assistance with repair work. This was cheaper than replacing a problem because of a lack of knowledge or experience. We had a wealth of knowledge, training and experience that could not be bought or printed in a manual.

In the long run the Coast Guard will benefit in cost, experience and knowledge for its people if we go back to a system like an Assist Team instead of contracting out the work we are supposed to be trained to do. Machinery Technicians will have better job satisfaction, too, when they know they can repair or fix something and do it right the first time.

Machinery changes all the time and mechanics need to be updated constantly so they can properly maintain the equipment. Manuals are part of the machinery and need to be kept updated just like standard Coast Guard manuals are always updated. Manuals are for reference and should not be used to replace experience or knowledge.

It was a big loss to the Coast Guard in cost, experience and knowledge when the Assist Teams were closed in the late 1980's and contracting out the work was supposed to be a cheaper way to go.

MKC Andy Heagle
OIC, RUITOFF Anchorage, Alaska

Dear On Scene Editor:

I read with interest MK1 William's article on MLB maintenance in the last ON SCENE. While as a desk driver, I cannot comment on his observation on life at the stations, I'll address two things I do know about: attitude toward small boats at this unit and technical publications.

Relatively speaking, small boats have small problems, while icebreakers have huge problems. We can actually help small boat engineers solve problems. Today, broken POLARs heal much slower. Solved problems buoy our spirits the way successful SAR cases raise a station's morale. Ergo, we love the "little" problems that the small boat end of the Coast Guard brings us. Several of my staff are boaters themselves. Ask us, we do care, and we do have enough time and knowledge to make a difference for you, your boat and your unit.

I believe that the general public's image of the Coast

Guard is largely formed by the boat SAR community and that there would be little support for icebreakers and buoy tenders if it wasn't for UTBs, MLBs, RHIBs and those ever-lovin' nonstandard boats.

Part of my section's responsibility is maintaining a library of drawings and technical publications for our own division's use and assisting Area units in keeping their information up to date. We recognize that the system is broken in many places. I was a participant in a Natural Working Group last summer that proposed major policy changes in the way the Engineering community (V, T, & A) handles technical information. G-ENE has hired a consultant to develop improvements in our policy and procedures, with the goal of getting the right information to the right people, ASAP. Both efforts included surveys of units at all levels of the Coast Guard to find your problems and potential solutions.

In the mean time, we're doing outreach to the units we serve – we can't afford to wait, sitting on our hands for a Coast Guard-wide solution to develop. My staff makes a presentation every year at the Group Engineer's conference on accessing technical information. We are also electronically distributing current drawing and tech pub indices to all MLCP units, so at least you'll have the most current information in the Coast Guard system for you unit.

One last note: I was intrigued by the article on the new PWB. I've already received several requests for drawings for this boat and the "Deep-Vee" TANB. I had never heard of these boats at the time requests started coming in, and I could do nothing. Since these boats were purchased under GSA schedule, none of the usual technical information is in the G-ENE system. Program managers sometimes forget, or cannot find, an appropriate mechanism for technical documentation procurement. This is something that future policy must forcefully address.

Ryan Young
Supervisor, MLC (vad) Tech Services Section

Editor's Note: To paraphrase MK1 Williams, "small" problems will GROW with the 47' MLB if our attitudes towards maintenance do not match the pace of our technology. *o/s*

* * *

Dear On Scene Editor:

I was angered and taken aback by your feature article centered on LT Brogan's "Lessons Learned" from the barge fire on Tampa Bay (ON SCENE 3/93). Your introductory disclaimer and concluding 'policy' synopsis hang as an indictment on the actions of LT Brogan and the crew of cutter SITKINAK. I quote: "[CGC SITKINAK's] ... actions do not fully comply with Commandant's policy...and current thinking on risk assessment...we in no way condone or encourage similar action." "We...were fortunate that 'no fatalities or serious injuries occurred.'"

Let me address these comments line by line.

"...do not fully comply with Commandant's policy...": I argue that the actions of SITKINAK's CO and crew did, FULLY AND COMPLETELY, comply with Commandant's policy; even though "Cutters ...are not on the distribution list..." for the policy, nor is it taught at the Academy or at PCO School. According to your article (I'd rather quote from the pub, but don't have a copy onboard), the Marine Safety Manual (MSM) reads: **"...Coast Guard personnel shall not engage in independent firefighting operations except...in the early stages of a fire to avert a significant threat without undue risk..."** SITKINAK never engaged in 'independent firefighting operations.' Upon arrival on scene, SITKINAK "joined in firefighting with three UTBs and two fire department (FD) boats." It is also reasonable to assume that SITKINAK arrived during "the early stages" of the fire and that LT Brogan classified the barge fire a 'significant threat.' I believe most operational commanders would categorize a fire on 600FT barge carrying 8 million gallons of jet fuel, diesel oil and gasoline in an enclosed waterway a 'significant threat'.

"...do not fully comply with...current thinking on risk assessment": Whose current thinking? I always understood that risk assessment is the responsibility of the On Scene Commander, OSC, (e.g. LT Brogan). MSM "policy" implies the same: "Coast Guard involvement shall be kept to a level commensurate with available leadership, experience, training and equipment." Who makes THAT call if not the OSC? LT Brogan competently assessed and managed the on scene risk. When he felt that the potential threat to CG personnel outweighed the benefits of continued action, he backed the units away (upwind) and waited for "expert" advice. Upon what do you base your implication that LT Brogan unnecessarily put Coast Guard resources and personnel at risk? His statement that...

"we were fortunate that no fatalities or serious injuries occurred"...I hope not. If so, you've taken his comment

out of context. What operational commander does not look back at a major marine accident and ask him/herself 'did I do the right thing?' or 'thank goodness nobody was hurt.' Do these thoughts impugn his actions? I think not.

I, for one, think LT Brogan's lessons learned article reads like a Summary Of Action for a Unit Commendation. I salute the courage of his crew and the actions he took as OSC. His willingness to point out lessons learned for other potential OSCs is also laudable. Your public indictment of his actions will stifle future lessons learned articles and take us back to the days when cutter COs were tempted to keep lessons learned and mishaps close to the chest to prevent the public 'armchair quarterbacking' of our actions.

BRAVO ZULU to SITKINAK!

Shame on you, editor.

P.S. About THE BOTTOM LINE (as stated in G-NRS comments)..."If people are off a burning vessel, back off (upwind) and wait for "expert" advice...IF we get the tasking and the right people, THEN we'll do it." Is this new policy? If so, it is, in my opinion, different enough from the current policy to warrant written promulgation and distribution; please include cutters and stations.

LT Richard Gill
Commanding Officer
USCGC SANIBEL (WPB-1312)

Editor's Note: Once again, firefighting proves to be a controversial issue. It may be a valid point that the present policy is not disseminated well enough. We still stress, however, that the MSM is the only existing servicewide firefighting policy. Above all, personnel safety is important. *o/s*

* * *

Dear On Scene Editor:

Would it be possible to have the print shop three-hole punch On Scene? It would be more convenient for cataloging in a three ring binder.

BMC J. A. Flanagan
Station Fort Totten, NY

Editor's Note: I would like more reader input. How many readers would like this done? For now, we will continue to print copies as normal. *o/s*

* * *

Dear On Scene Editor:

At our last Change of Watch meeting in North Kansas City, Missouri, it was brought to our attention that the Federal Communications Commission (FCC) was planning on raising the permit for a Radiotelephone Operator's Permit from $35 to $70.

As a member of the U. S. Coast Guard Auxiliary serving at Lake Ozark, Missouri, I would like to make a small suggestion. As you know, we are volunteers that enjoy serving the boating public for their safety. The expenses for uniforms, SAR's, manning Vessel Examination Stations, boat shows, travelling to meetings and various Auxiliary functions, our facilities, equipment, such as the VHF Marine Radios, etc., all come out of our pockets. My suggestion is that the Auxiliary be exempt from paying a fee for using the Radiotelephones. Communications are extremely important during operations on the water as you well know.

I would hope that the U. S. Coast Guard would use its influence to make those who serve in the Auxiliary exempt from the FCC fees.

Bob Whitehead
Lake Ozark, MO

Dear On Scene Editor:

In the 3/93 issue of ON SCENE, there was an article by LCDR Wm. Dean Lee, G-NRS-1 (page 36), entitled "U. S. Coast Guard Maritime SAR Assistance . . ."

May I have permission to reprint this article in our Auxiliary Division VIII, District IIS newletter "The Channel Islands Spindrift?" The LCDR clearly states the policy and I feel our members would benefit from this article's clarity.

James Moody
DCP VII Auxiliary

Dear On Scene Editor:

I thoroughly enjoy ON SCENE and find it to be very informative. I would like to have your blanket permission to copy various articles for distribution to my Flotilla (I am the FSO-OP) and to other personnel within the CG Auxiliary. The experience and insight gained from actual SAR cases is an excellent training aid and should be disseminated throughout the Coast Guard family.

Larry A. Truesdell, D5 NA Coordinator-CM

Editor's Note: Articles from ON SCENE may be copied under the following guidelines: articles may be used for general internal and training purposes, should cite the source, and may not be used for personal gain. *o/s*

Dear On Scene Editor:

As flotilla commander, I receive ON SCENE. First, I would like to thank you and commend you on a first class job. Second, I find the information helpful during public education classes and during courtesy marine examinations. Examples of good and bad boating always help get the message across.

Keep up the good work. You never know how far your message goes.

Joe Bayer
FC–08–10

Editor's Note: Thanks! *o/s*

Dear On Scene Editor:

The edition marked 3/93 was significant to Auxiliarists for two reasons. The first was the wonderful "101: A Basic Introduction for Regulars" about the Auxiliary.

The second was about the almost complete lack of coverage of the role the Auxiliary played in the Tampa Oil Spill.

On 10 August 1993, the USCG joined with numerous Federal, state, county and municipal and civil organizations to combat a disastrous oil spill and fire caused by the M/V Balsa 37, tug and barge Seafarer/Ocean 255 and tug and barge Capt. Fred Bouchard/B155. The collision resulted in a massive multiagency response to the raging fire aboard the tug and barge Seafare/Ocean 255, the potential major discharge of barrels of number six oil from barge B155 and the threat of the M/V Balsa sinking with her entire cargo of phosphate.

A call from Group St. Petersburg was received by our Division VII Ops Officer requesting immediate assistance by providing vessels and personnel on the scene. The division's newly formed Rapid Deployment Team was put into action with six vessels, twenty–two personnel and two radio stations within 1½ hours. Our first boats were at the scene within one hour of the spill!

The on scene Auxiliary members established safety zones around the damaged vessels and enabled the rescue and fire fighting teams to work safely. Division VII requested assistance from Divisions VIII and XI to cover the required duties assigned by the Coast Guard.

Auxiliary personnel served a total of 1,336 man hours and completed 40 patrols, with some involving 10 to 14 hour shifts.

Joe Lori
Flotilla Commander, 7–4

Editor's Note: The best way to have your unit's contributions recognized is to submit an article. Someone has to! *o/s*

* * *

Dear On Scene Editor:

Editor's Note: This is a copy of a letter addressed to the Commandant's Bulletin.

I read the article in the February Commandant's Bulletin titled "CG Changes How Stations Do Business" and found it most interesting. As a member of the reality check team of the Station Staffing Study, I like to keep abreast on the progress of improving station operations. Administration, personnel assignments and lack of officers familiar with station operations are still problem areas.

Let me first address administration. Headquarters deleted the amount of publications at stations and reduced some required reports. To some extent this helped but it seems districts, groups and MLC increased their requirements. Some examples are: monthly "What's Happening" reports to district, separate letters of designation for various collateral duties to MLC, and requiring dedicated LE hour quotas of small boats. It appears those in charge have more interest in paper trails and numbers than reducing the burdens already placed on stations.

VISA cards were mentioned as improving the financial administration. The use of these cards HAS greatly improved the station financial management. We improved the commercial purchase of goods but are encountering difficulties with the Federal Supply System. XPOs are spending numerous hours at the computer researching stock numbers and prices from FedLog only to encounter more difficulties with ARMS. Another "time consumer" is trying to maintain balanced books between the unit ledger and the PES report. Want to see a grown person cry? Try to interpret the vehicle and telephone charges on this

report. Why not have groups receive PES reports and balance subordinate units books? The Fifth District does. Why not Coast Guard wide? It might ease some of the station administrative burden.

Personnel assignments remain a thorn in the side of every Officer in Charge/Commanding Officer. This is especially true with non-rated personnel. We still have stations operating at less than full strength. This is possibly caused by discharges, medical evaluations, etc. To help the station these people are usually transferred to the group. Since these members are still assigned to the group and the group is "up to strength." No replacement is ordered in. The station suffers and operates at reduced strength. This policy was in effect prior to the Station Staffing Study and remains virtually unchanged.

The lack of officers familiar with station operations is my personal "sore spot." I have little respect for group commanders who are more concerned about shining brass than the operations and welfare of their people. Yes, those people are out there and are in command! Our future group commanders must come from the junior officers now in jobs such as group Ops Boss and some station COs. They can also come from COs of WPBs. Each works at or with stations and gains valuable experience in doing so. I don't see this happening. Rather, those who become familiar with stations receive assignments in another field to "round out" their careers. As long as this policy remains stations will remain misunderstood and overworked.

In closing, I stated what I feel are still some of the problems encountered at stations. These are just a drop in the bucket. I failed to mention such things as hazardous waste management and boat maintenance both of which demand enormous amounts of time and resources. The article in the bulletin paints a beautiful picture of changes at stations. However, beauty is only skin deep. Real problems still remain; all is not rosy and beautiful as the article suggests. I feel before another article is written, G-NRS should insure the changes mentioned are in place and operating successfully.

BMCM W. R. Bless
OIC, USCGC POINT TURNER (WPB 82365)

Editor's Note: We don't have the space to list all the proposed HQ policies that we stop before they increase the work load at stations. It might be that the word has not yet filtered down to those that continue to task stations with what are perceived to be "value-added" processes. *o/s*

Dear On Scene Editor:

In your 3/93 issue just received, (which I assume should have had a date of 3/94), there was a very interesting article by Ensign Clayborne, G-MPS on page 38 regarding the new PWB replacement vessels.

As a Coast Guard Auxiliarist, I am very active in our operations program in which we perform patrol duty on a regular basis. The new 21' looks like an ideal vessel with which to patrol the area lakes where we are located. I have been looking for a boat like the 21' PWB to use in Auxiliary patrol duty for a long time.

Would the latest version of the 21' (completely outfitted to Coast Guard specifications but without the CG stripe) be available to Auxiliarists to purchase from Coast Guard resources (or from whomever) for use in our operations program? If so, who would I need to contact and where could a I obtain more information on both the 21' and the upcoming 28' boats?

Ronald L. Jacobs
Former Division Captain, Division X

Editor's Note: Issue number 3/93 is correct. That was the third of 3 issues in 1993. This is the first issue of 1994 rather than the January, 1994 issue.

Regarding the 21' PWB, LTJG Wayne Clayborne says: government price is around $40K plus engines and electronics. Any questions, contact him at (202)267-0501. The vessel is available through Sea Ark Marine, Monticello, AR. *o/s*

About Letters to the Editor:

ON SCENE seeks letters to the editor and will gladly publish them. Some rules do apply, though.

1) *The author's name, address, and telephone number must accompany the letter.*
2) *If requested, the author's name will be withheld, but nameless letters will not be considered.*
3) *ON SCENE has the right to edit all letters for taste, grammar and length.*

Team Ice Rescue

By: LTJG David J. Palazzetti, USCGC BITTERSWEET (WLB 389)

The Coast Guard is filled with good-natured rivalries between the White Hull/Black Hull fleet, aviators and the rest. However, once on the mission at hand we put our differences aside and realize we all have the same ensign flying on our masts.

Recently, one "routine" SAR case involving Group Woods Hole units, Air Station Cape Cod and USCGC BITTERSWEET (WLB 389) highlighted how the different resource capabilities Coast Guard surface and air communities possess provide an extremely capable rescue force. On the morning of January 20, 1994, the fishing community of Cape Cod woke up to a fairly rare and unwelcome sight on the waters of Nantucket Sound. . . ICE. The 75' wooden-hulled dragger MAX&ANDREW ran into particular difficulties and attempted increasing speed to plow its way out of Hyannisport Harbor. As the speed increased the dragger pierced several hull planks and began taking on water. Unable to make any further progress, MAX&ANDREW was trapped in the ice floes and radioed to Group Woods Hole for assistance.

Upon receiving the initial call, Station Woods Hole's 41' and 44' boats were enroute along with an Air Station Cape Cod HH-60. Only thirty minutes later, Rescue 6017 had delivered two P-1 pumps to MAX&ANDREW and was standing by on scene. Due to the 4-5 inches of ice CG41320 was unable to proceed and was forced to stand off. Fortunately, the steel hulled F/V MELISSA&VANESSA saw the disabled MAX&ANDREW and proceeded to assist. CG44339 soon arrived to find flooding on the MAX&ANDREW had caused a starboard list and a loss of at least 5 inches of freeboard, in spite of the operating P-1 pumps. MAX&ANDREW then reported they lost all power due to flooding water rising above the generator and main engines. Sensing the urgency of the situation, CG44339 called for more assistance and ordered the crew of the MAX&ANDREW to abandon ship and board the MELISSA&VANESSA.

Shortly before "hooking" into Horseshoe Shoal LB 20 in the Nantucket Sound Main Channel, BITTERSWEET received a call from Group Woods Hole requesting SAR assistance for the crippled fishing vessel. CGC TOWLINE operating in Buzzards Bay was also notified and proceeded enroute the scene. While the crew of BITTERSWEET quickly cleared the buoy deck of all ATON gear and shifted to the R&A Bill, the bridge team had a problem of its own. The waters outside the main Nantucket Sound Channel are not conducive to a vessel of BITTERSWEET's draft and with the few navigational aids available having been either dragged under the ice floes or completely off station, electronic navigation was the key. Using its Electronic Chart Display Information System (ECDIS), an electronic charting system with Differential GPS input, and several radar ranges for verification, BITTERSWEET made best speed as she dodged the various shoals to the MAX&ANDREW.

Once on scene BITTERSWEET found the vessel on a 20 degree list with the starboard scuppers awash. With the rescue plan already prepared, the risks were assessed and an approach was made to the starboard bow. Realizing the only way to save the vessel was to patch the unseen holes in the bow, tending lines attached to a large tarp were passed to CG44339 with the intent to have them drive around the port side and wrap the tarp over the hole while BITTERSWEET secured the other end. Unfortunately, the thick ice severely restricted CG44339's maneuverability and the attempt was aborted.

One benefit of a buoytender's hull design is that the buoy deck's size and proximity to the waterline makes for an excellent R&A staging platform With the buoy port even with the MAX&ANDREW's bow, two small teams were sent over to investigate from the main deck only and set up P-1 pumps. Next, the MELISSA&VANESSA was contacted and agreed to assist with the tarp rigging. Having a strong engine and hull, the MELISSA&VANESSA made their approach and was able to retrieve the tarp and pass the end to the BITTERSWEET personnel on the MAX&ANDREW. As the water pressure forced the tarp along the hull, the forward holes on the vessel were effectively plugged, but other holes were not allowing the pumps to gain any ground. To get ahead of the flooding, all available

assets were used. While BITTERSWEET's crew was rigging an eductor to the firemain and an electric submersible to dewater the fish hold, Rescue 6016 dropped two additional P-1 pumps on BITTERSWEET's fantail. With the addition of these 4 pumps to the battle, progress was made and the list began to reduce. After almost 2 hours of dewatering with a combination of these 8 pumps, and patching/plugging of a few more holes, the list was removed and the situation stabilized.

The next course of business was to determine where (and how) to transport the splintered boat. After Group Woods Hole Operations Center found an open and willing dry dock on nearby Martha's Vineyard the first part of the problem was solved. By this time, TOWLINE was on scene and able to provide the exact support needed to solve the "how " part of the problem. Knowing the tarp covered bow of the vessel would not be able to take any more ice ramming, BITTERSWEET placed the fishing boat in an alongside tow and positioned the boat so that it would ride in the ice-free path cut by TOWLINE steaming about 150 yards ahead. With BITTERSWEET able to cut its own path the trio made its way to Vineyard Haven where BITTERSWEET passed the tow to TOWLINE who guided the vessel into the shipyard.

The rescue was truly a team effort, one in which each unit provided its own expertise and skills to get the job done. Without Group Woods Hole's coordination, Stations Woods Hole's rapid response and initial on scene direction, Air Station Cape Cod's pump drops, BITTERSWEET's R&A capabilities, and TOWLINE's icebreaking, this rescue could not have been achieved.

Editor's Note: ***LTJG "Rico" Palazzetti is now Commanding Officer of USCGC POINT ARENA (WPB 82346). o/s***

RIB SPONSON QUICK REPAIR

By: CWO2 Stephen Cirinna, USCGC SUNDEW (WLB 404)

During recent NOAA weather operations on Lake Superior, at Stannard Rock Lighthouse, the port forward sponson of our RIB was punctured. This happened while transferring the service party to the light. The resulting hole was a 2" long tear. The service party was expected to be on the light for about 2 hours, not long enough to properly repair the tear. We fashioned a homemade clamp patch, similar to those found in life raft repair kits, out of 2 flat pieces of metal card file drawer dividers), 2 pieces of rubber, and a 2 inch long 10x32 screw and nut. Once clamped in place, the patch was very effective in holding air. We haven't tested the life raft clamp patch on an RIB, but if there is a surveyed RIB with a serviceable sponson out there I recommend that clamp patch be tested. We have an extra clamp patch available to use for the test. Although we hope to never use it, SUNDEW now carries a clamp patch kit in the RIB to repair any future tears. These clamp patches should be available through your life raft service center, that's where we got ours *o/s*

USCGC WOODRUSH Aids Sinking YORKTOWN CLIPPER

By: LTJG Michael C. Wessel, USCGC WOODRUSH (WLB 407)

The Yorktown Clipper

While Coast Guard Cutter WOODRUSH's primary mission is maintaining aids to navigation (AtoN) in southeast Alaska, WOODRUSH, homeported in Sitka AK, is also called upon to aid those in distress.

On 18 August 1993, CGC WOODRUSH and Air Station Sitka combined efforts to assist the Cruise Ship Yorktown Clipper after she ran aground near Gieke Rocks in the Glacier Bay National Park. The 248' vessel, with over 130 passengers, had struck a rock and tore numerous holes in its underwater body. Three water tight compartments had flooded immediately and the Yorktown Clipper was precariously close to sinking. Fortunately, the Cruise Ship Westerdam was in the vicinity and quickly embarked all the passengers, leaving behind a skeleton crew to fight the flooding. Two fuel tanks had also been ruptured by the grounding, threatening to release over 20,000 gallons of

fuel oil into the fragile ecosystem of the national park.

The master of the vessel, knowing the severity of his situation, called for assistance. Throughout Southeast Alaska, resources and personnel were gathered and dispatched to render assistance. The C/S Westerdam, the National Park Service, CG Air Station Sitka, and the Marine Safety Office Juneau were on scene in shore order, transporting pumps and personnel to the stricken vessel. USCGC WOODRUSH, 70 miles from the scene and on her way home from completing a ten day AtoN run, was quickly diverted to assist. Shortly after the arrival of the first wave of rescuers, it was determined that these personnel did not have the experience or proper equipment to stem the flooding and save the ship. WOODRUSH quickly mustered a Rescue and Assistance (R&A) team, a P-250 pump and other damage control gear together for further transport to the scene by an Air Station Sitka HH-60. Jayhawk helicopter.

Shortly after this team was deployed to the Yorktown Clipper, it became evident that even this assistance would not be enough to save the ship. Another team from WOODRUSH, with WOODRUSH's last P-250 pump, was put together and again airlifted to the scene. Each team and associated equipment had been hoisted from WOODRUSH's decks by the steady hand of Air Station Sitka personnel.

Once aboard the Yorktown Clipper, the R&A teams quickly took control of the situation and commenced combating the flooding. With the assistance of the Yorktown Clipper's Chief Engineer, the R&A team battled the flooding by shoring bulkheads and manhole covers and feverishly pumping with the P-250's. These two teams worked throughout the night to control the flooding and stabilize the ship. The efforts of WOODRUSH's R&A team were described with the statement an MSO officer, "If not for the rapid and professional response of WOODRUSH's R&A team, Yorktown Clipper would be gone to the bottom of the bay."

CGC WOODRUSH arrived on scene approximately six hours after the initial MAYDAY. Once on scene, WOODRUSH provided personnel, logistics and communications assistance. Following the exhaustive damage control efforts, which included patching and plugging holes in the hull, shoring leaking hatches, and continual pumping of flooded compartments, it was evident that the danger of losing the Yorktown Clipper had been averted. The parent company of the Clipper had dispatched a salvager to assist in the lightering of fuel and final securing of the damaged vessel. After assisting with the lightering of fuel and five days of damage control efforts, WOODRUSH was released from the case. Salvage divers reported over 11 holes had penetrated the hull of the Clipper. All involved agreed that if not for the rapid response by Air Station Sitka and WOODRUSH, the Yorktown Clipper would likely have been lost and the fragile Glacier Bay ecosystem would have been greatly effected.

On 27 August 93, WOODRUSH was called upon to assist fire fighting efforts. This time, three barges with structures were engulfed in flame at a logging camp in Hanus Bay. Again, notified of the fire by Air Station Sitka, a WOODRUSH fire fighting team was compiled and outfitted with fire fighting gear. Arriving at Air Station Sitka shortly after notification of the fire, the team, along with personnel from Air Station Sitka and Sitka Volunteer Fire Fighters, was transported by helicopter to the scene.

On scene, the teams found all three barges aflame from stem to stern. Fighting first one, then another fire, the blaze was brought under control. Aboard on barge the fuel tanks had caught on fire and had to be extinguished. On another, a fuel tank had to be removed by crane to prevent additional fuel from reaching the fire.

These cases have shown that the unique skills of fighting fires and controlling damage aboard ships, skills that are honed and perfected in a buoytender environment, combined with the ability to get right on top of the scene quickly with an HH-60. aircraft, is a synergism that greatly enhances the Coast Guard's search and rescue effort.

In all cases, in what appears to be a growing trend, the cooperative efforts between Air Station Sitka and WOODRUSH proved to be effective in dealing with the particularly demanding Search and Rescue needs of Southeast Alaska. Both units proved themselves to be in keeping with the Coast Guard motto, Semper Paratus, always ready. *o/s*

SAR Controllers of the Year

Compiled By: G-NRS

The 1993 awards for RCC Controller of the Year and Group Controller of the year were presented this winter. The winners are:

RCC Award - 9th District Operations Center

LT Mark Rizzo, LT Anthony Popiel
LTJG William Lawrence, QMC Leo Deon
QM1 Philip Wolf, QM1 Michael Schultz
RD1 John Shea

Group Award - Group Los Angeles-Long Beach

QM2 J. W. Bride

The winners were chosen from a variety of RCC and group nominees. The submissions are printed here as "Overdue AMERICAN EXPRESS" and "Lost SECOND WIND."

Congratulations to the winners and to the many worthy nominations! *o/s*

Overdue AMERICAN EXPRESS

By: Ninth District Operations Center

RCC Award

Three pleasure craft departed Waukegon, Illinois at 1300Q on 20 August 1993, enroute Saugatuck, Michigan. They expected to complete the 75 mile journey in about 4 hours. None of the three was equipped with radio, EPIRB, or LORAN. A magnetic compass was their only means of navigation. They simply intended to steer a course of 060M to 075M to reach their destination. Winds were out of the north at 15-25 knots and waves were forecast at 6-8 feet by the Weather Service.

Midway across Lake Michigan (approx 1430Q), the AMERICAN EXPRESS stopped to allow one of its four passengers to urinate. The man was seasick so he donned a PFD and entered the water to relieve himself. The operator of AMERICAN EXPRESS told the other two boats to continue, stating he would catch up to them shortly. Those two vessels landed just north of Saugatuck around 1800Q. When the AMERICAN EXPRESS was nowhere in sight, they reported it overdue to Station Grand Haven. Precomms and excomms were unsuccessful so the station notified Group Grand Haven.

The D9 operations center learned of the situation at 2230Q and immediately assumed SMC. D9 quickly directed Group Milwaukee stations at Kenosha and Wilmette Harbor to conduct excomms and launched a helicopter from Air Station Chicago. The HH-65 performed a trackline search between Waukegon and Saugatuck which yielded negative results. The helo secured at about 210300Q. The D9 controller then ran a Great Lakes specific computer drift model to determine probable drift of AMERICAN EXPRESS from several different locations. Results of the model indicated a significant southerly drift. D9 used this information to devise a first light search for the morning of 21 August.

A Chicago HH-65 conducted a parallel search at first light (0700Q) while Group Grand Haven and Milwaukee stations conducted shoreline searches and continued excomms. As the HH-65 neared completion

of its search area, no signs of the missing boaters were evident. The D9 controller thought the boats might have travelled farther north than expected as they pointed into the seas to find a smoother ride. With that in mind, he expanded the search area quite a bit to the north and tasked a second helicopter (an HH-60. from A/S Traverse City) to join the search. Both helicopters commenced searching the new search area just before noon. At about 1430Q, the HH-60. found two people clinging to debris, about 20 miles off shore. The husband and wife were hoisted from the water and immediately flown to a Wisconsin hospital. Both were suffering from hypothermia. When interviewed, they said their boat was swamped by large waves shortly after they parted company with the other two boats. The boat then broke apart and sank so the four passengers donned PFDs and clung to debris. About an hour before the first couple was found, the other man and woman became delirious, removed their PFDs, and attempted to swim to shore.

The HH-65 and a UTB were quickly redirected to commence an expanding square search about the location where the two PIW were found. During the search, the helo spotted several pieces of debris. Just before sunset they located the deceased body of the missing woman. She was recovered by the UTB and taken to shore in Wisconsin. Search units were secured for the day after sunset. The HH-65 and several small boats returned at first light on August 22 to continue searching for the last missing person. Several sorties yielded negative results and the search effort was suspended at about 1300Q.

Although the search effort did not find the fourth person, the search was well planned by the SMC. Almost no information was available to establish datum since the boaters had no navigation equipment and the time of the incident was unknown. SMC took immediate, positive action from the outset. They skillfully pursued all possible leads for information, including friends and family of the missing boaters as well as people on the other two boats. OPCEN personnel demonstrated excellent foresight developing search areas and determining employment of SRUs. Because of the OPCEN's search planning effort, two people (with young children at home) were saved.

Editor's Note: Contrary to popular belief, LT Popiel's picture is not in this article just because he's my brother! *o/s*

Ninth District Operations Center.

Gaining SECOND WIND

By: Eleventh District (osr)

Group Award

At 0146T, during the early morning hours of 16 October 1993, Group Los Angeles–Long Beach received a distress call on channel 16 VHF/FM from the S/V SECOND WIND located between Channel Islands Harbor and Port Hueneme, California. The S/V reported that they had recovered one person from the water who was from a capsized catamaran. Two other persons were still missing and had not been seen for approximately four hours.

The three men departed Channel Islands Harbor on 15 October 1993 at 1530T to go sailing. At 1745T, the catamaran capsized causing damage to the hulls. The three men were able to recover and observed the hulls to be taking on water. At 1700T, the catamaran capsized again and was recovered. At 13800T, the catamaran pitch–polled. The three men were spent to the point of exhaustion, and now that the catamaran was totally capsized, they were unable to recover. The sun was setting and they attempted to attract the attention of an outbound vessel by firing a flare with negative results. The flare gun was subsequently lost along with one of the life jackets. A decision was made at 2141 that the two men with life jackets would attempt to swim to shore while the remaining person in the water would stay with the catamaran. The two swimmers tried to take turns leading each other until 0115T when one of the swimmers began to succumb to the elements. Fearing for his safety, the second swimmer swam on until he was recovered by the SECOND WIND.

Back at the catamaran the remaining person attempted to remain on top of the vessel to keep himself out of the water. Two vessels passed close by during the darkness, one within forty feet. None of the vessels heard his cries for help and he had no signalling device.

After receiving the initial information, QM2 Bride immediately initiated the search and rescue system. He issued an Urgent Marine Information Broadcast (UMIB), launched an Air Station LA HH–65 helicopter, Station Channel Island 41' UTB and the CGC POINT CAMDEN. He insured that a Datum Marker Buoy (DMB) was deployed to gauge the Total Water Current. He planned and coordinated seven searches, assigning the CGC POINT CAMDEN as the On Scene Commander (OSC). He used the SECOND WIND as an initial DMB to mark the area of highest probability until a more reliable electronic means could be established. He insured that the proper medical authorities were alerted and monitored the medical treatment given on scene to the persons in the water. One of the swimmers was treated for severe hypothermia with a body temperature of 86 degrees F.

After the initial report at 0149T, the second person in the water was recovered at 0252T and the final person was recovered at 0610T. An important procedure that should not be overlooked is that QM2 Bride did not stop at his initial search plan. When the last person was recovered he had already taken his DMB information and was planning the next round of searches.

47' MLB UPDATE

By: CDR M. J. Lewandowski, G-NRS-2

Things have continued to progress rapidly with the 47' Motor Lifeboat (MLB) Replacement Project. The last of the five pre-production MLBs was delivered to Station Gloucester, MA on 21 January. We are fully into the Operational Test and Development Phase of the project.

The Acquisition Plan (This might be boring, but it explains why things are the way they are.)

The original plan was to have one full year's OT&E, with five boats, before making a go-no-go decision on whether the 47-footer would be our future lifeboat. This fourth "key decision point" (KDP4) is scheduled for late September 1994. As you can see, the decision on whether to go ahead with a full production run will be made before a full year's OT&E with all five boats.

Future Acquisition, Construction and Improvement (AC&I) funding is very tight. The unofficial truism for AC&I projects is "they who execute [the project plan] get funded." In other words, if the production contract can be awarded before September 30, 1995, the MLB replacement probably won't face the risk of competing internally against other high-priority acquisition projects. Other people say "the new MLB is a 'lock' if we get it awarded in FY-95."

As construction delays and manufacturer quality problems played havoc with delivery schedules, our concern has been with the length of the OT&E period. In effect, the amount of "boat-months" available for OT&E before KDP4 has been cut by about 35%. Naturally, we missed much of the late-fall heavy weather period. To get all the "documentation" (i.e. paperwork) needed by KDP4, we'll probably start trying to answer whether the vessel meets the Critical Operation Issues (COIs) by mid-summer. That means we might not see the whole effect of a high workload, seasonal response ("summer SAR season").

We know from Developmental Test & Evaluation (DT&E) on the prototype MLB 47200 that the boat's design is sound. (Two of them have survived roll "events" since November...more on that later.) We're seeing from some of the units fortunate enough to have a 47 that it probably can do the job. We also know that the boats have some problems and glitches. We don't fully know how well they "fit" in our existing station "infrastructure" of support, maintenance, and training requirements.

Problems, Glitches & Retrofits

We've been trying to make the boats the best possible. Of the many changes made between the prototype and the preproduction boats, we're starting to see recommendations that some get "undone." Oh, well. On the other hand, many "new" items weren't considered before. Some of them are downright annoying and will cause further problems down the pike.

Mast Platform-Buoyancy Box

One example is the "mast platform-buoyancy box." The top of platform is supposedly flat. With the "dimpled aluminum" sections on the top, when it rains, water collects. It's not much (hah), until someone opens the door to the survivors compartment and the boat rolls. Ker-splash on the unsuspecting, but most of the water ends up soaking the survivors compartment insulation. UNSAT! The final design on the fix isn't complete, but may include a combination of edge-channel, camber, and rake.

Slushies

The prototype didn't get the pleasure of operating in near-freezing water. On the 44' MLB and UTBs, relatively warmer raw water is allowed to mix at the raw water intake. This reduces slush uptake (which clogs the strainers, restricts flow, burns out impellers and prevents cooling). 47205's delivery trip to Gloucester proved the need for a fix. A quick retrofit to have a recirculating flow crossover was in order.

Climate Control

Cold weather operations showed other shortcomings. A long-standing effort with the 47 has been to ensure less crew fatigue (and higher crew performance) through increased habitability. As found during the extremely cold winter in the Northeast, the preproduction boats' Heating Ventilation and Air Conditioning (HVAC) was, for many days, ineffective. With inadequate heating to the enclosed bridge, the windscreen heaters couldn't keep condensation and ice

from forming on the inside of the windows. Different options are being considered for the type of HVAC arrangement. These include separating the "heating" from the air conditioning, getting a different make of fully self enclosed model (that uses a lot of electricity) or even some combination. The fix will probably be environmentally compatible (to get us through the next 30 years) and has to work better than the present system.

Other things

The PPMLB stations are still putting up with electronics and electrical problems, control systems difficulties, helm chair problems, steering, and other things. Now that warmer weather is here, we probably won't have heating problems, but I wonder about the A/C.

How Cold Was It?

The 47 was not designed to be an icebreaker. Though some people were concerned about the ability of an aluminum hull to operate in ice, 47205 got ample opportunity to show that the boat didn't have to be tied to the dock during an extremely cold New England winter. Of course we weren't talking backing and ramming, but reports of slicing through 4–6 inches of ice were heard. The elastomeric bottom paint didn't really hold up, but that probably could be expected. At least we know we won't have to explain that 25% of the potential fleet can't operate during a severe winter (when an "all weather lifeboat" is needed most).

Watertight Integrity

A big concern, early on, was that the major closure fittings either weren't watertight or couldn't meet specific closure fitting tests. Though some concern centered around the ability to work a relatively lightweight fitting into a heavy weather boat, much of the concern centered on door–frame installation by the builder. Engineering personnel noted the thin–section aluminum doorframes were installed with a continuous weld around the perimeter. This possibly caused warping and less–than–satisfactory fit. New door assemblies were built. The door manufacturer has been going around installing the new doors to ensure proper installation procedures.

A sidelight to watertight integrity and stability: In discussions with one of the design engineers, a point was made about the boat's design. Even if there was free communication through the hull into one compartment, the remaining buoyancy would keep the boat high enough afloat so that the new waterline would still be below the watertight closure coamings for the compartment involved.

Boat Operations

Despite field level concerns about watertight integrity, some units got a good degree of operating experience and training accomplished. Probably the most significant occurrences were two separate "roll events." One was experienced by Station Oregon Inlet and 47202 last November and another by Station Cape Disappointment and 47200 in January. In both instances, the vessels took breaking waves (estimated at over 10 feet) almost beam–on, at a slow speed. In both cases, the maximum roll was to approximately 140–degrees (figure 1), nobody was injured in either event, with only minor damage mostly to electronics equipment. Though inadvertently, we think these two incidents go a long way to proving the survivability of the vessel.

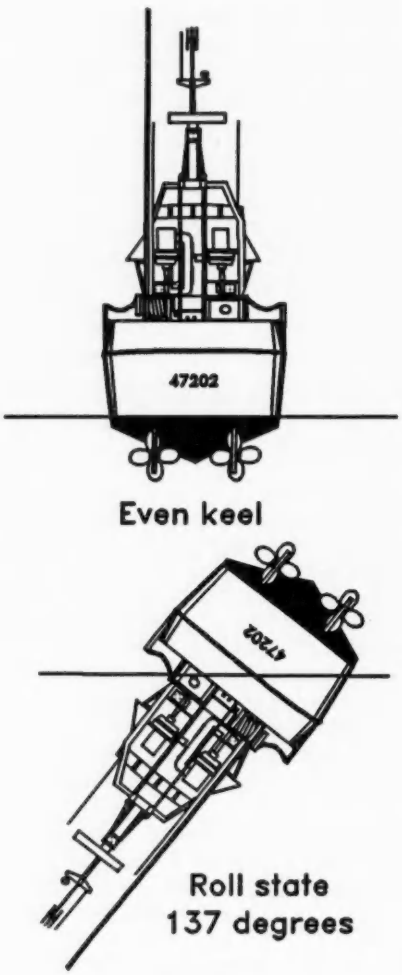


Figure 1.

One thing we do know is the craft's ability to tow large vessels. On one occasion, Station Cape May used 47201 to tow a 90-foot, 185 gross ton vessel, well above the stated requirement. On another occasion, Station Tillamook Bay used 47203 to tow a 82-foot, 147-gross ton stern trawler. Initially the unit was concerned that the 47 couldn't make speed and that it experienced much cavitation, but when it was noted that the vessel had a full net in the water (and that the F/V displaced almost 200 tons when fully loaded), things don't look so bad.

Fire Fighting Capability

The original Sponsor's Requirement Document (SRD) called for firefighting capability comparable to that on a 44' MLB. The 44' MLB has a fixed fire fighting system with engine driven pump, and a CGP-5 dewatering pump that can double as a fire pump. The 47 has just the CGP-5. Preliminary field feedback says this just isn't enough. I'm not sure which avenue this will continue on.

Prior to KDP4, one of the tasks we must do is update our Operational Requirements Document (old SRD). Our review of the program requirements, past information, and future plans will be done with the goal of defining an "actual capability". In discussions with the project staff, any major change to the existing configuration, if warranted, probably wouldn't occur until after the production run. For now, it's going to be one pump per boat.

OT&E Input

With the exception of fire fighting capability, an early survey done at three of the PPMLB stations through the R & D Center shows a more than favorable comparison against the 44' MLB. Against an undefined "ideal" MLB, the preliminary crew survey again showed high marks.

We haven't had as much success in determining reliability, maintenance load, and availability of the 47. Less-than-complete data input has been provided to the R&D Center, but we're hoping this improves.

The Motion Data Recording (MDR) equipment has showed its worth on the 47202 roll event. The angle-of-heel sensor gave a very accurate indication of exactly how far the boat rolled, a true record of how long the boat took to roll and re-right, direction the vessel was headed, and a good record of helm and engine response. Unfortunately, 47200 didn't have an MDR installed during its roll event, but it should have one by mid-May. Figures (2) and (3) are the record from the 47202 roll event, giving an example of the type of data recorded by the MDR.

What's Coming Up

By the time you read this, there will have been an OT&E conference for all involved with the project. Hopefully, operators and maintainers will continue to interact with the project staff and designers.

Though some of the major recommended engineering changes won't be completed by the time the production request for proposals goes out, we still expect that improvements will be made to the boats before they hit the field. One interesting method being discussed is to have a central "post-construction availability" to work the bugs out and to make any new engineering changes. We'll see.

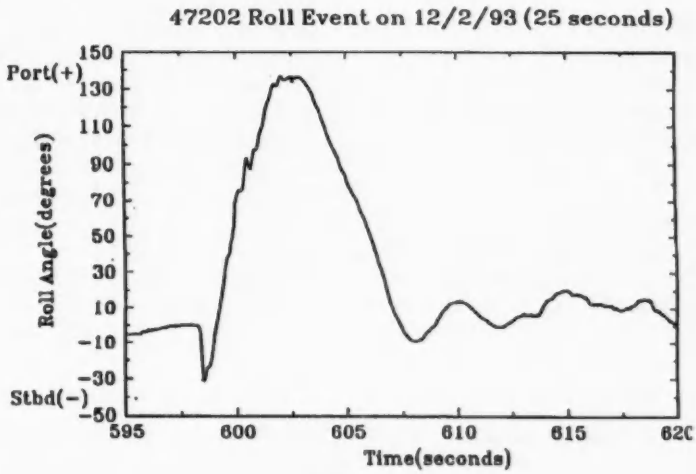


Figure 2.

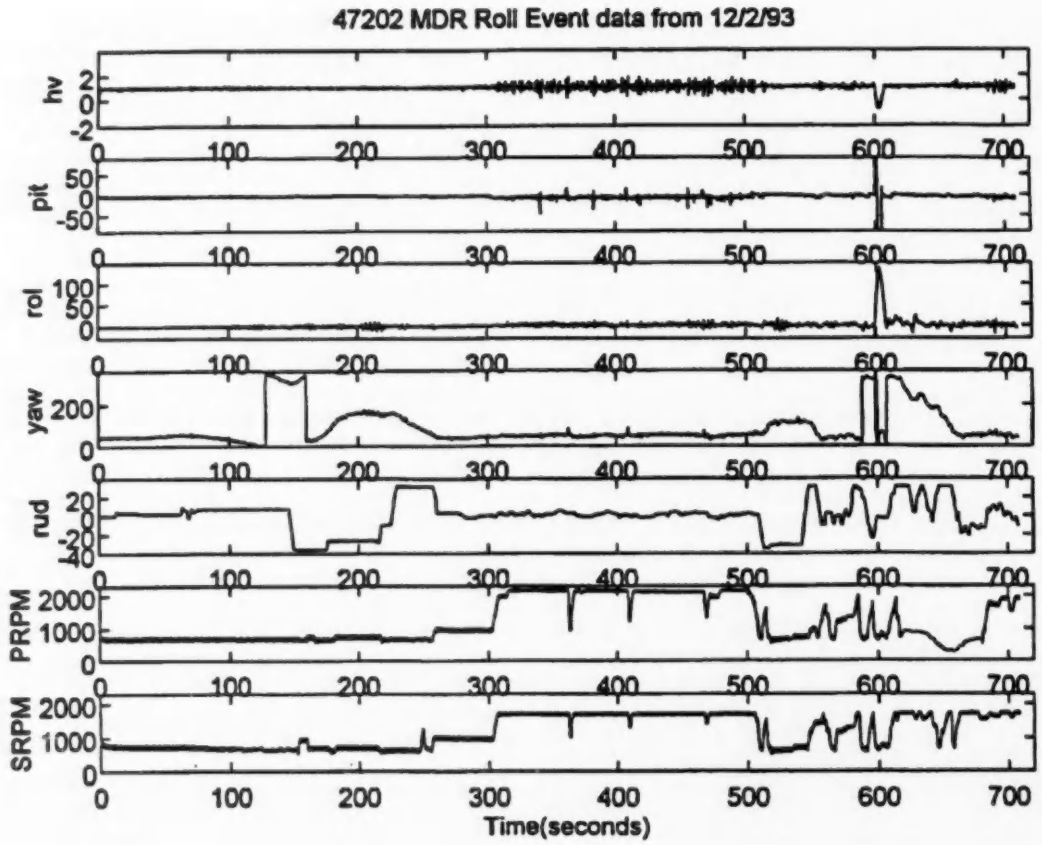


Figure 2.

The items listed here are the categories of information produced by the MDR on the roll event from 47202 on 02 December 1993. The event occurred at approximately time 600 on the timeline. 47202 was past 90 degrees for about 4 seconds.

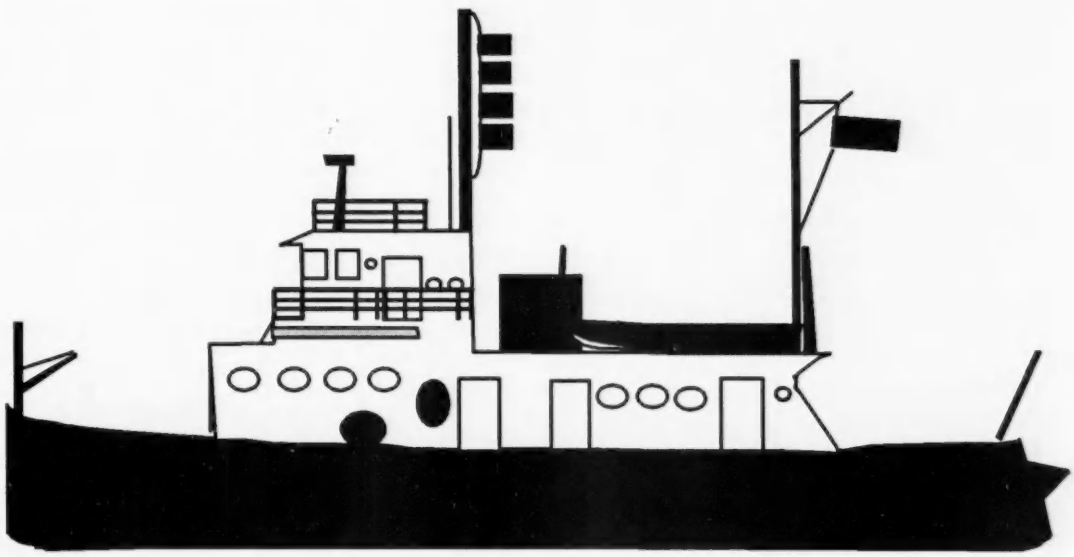
1. **hv**: heave acceleration (g)
2. **pit**: pitch angle (degrees)
3. **rol**: roll angle (degrees)
4. **yaw**: yaw angle (degrees)
5. **rud**: rudder angle (degrees)
6. **PRPM**: port engine speed (RPM)
7. **SRPM**: starboard engine speed (RPM)

The MDR also recorded heading, position and time. Note the engine RPM after the boat's rerighting. Starboard engine was constant at approximately 750 RPM. The port engine dropped to 300 RPM, possibly because of water in the engine intakes. *o/s*

Editor's note: Thanks to the staff of the Research and Development Center for their report on the roll event!

Case Review: Tug CL1 With Sunken Barge

LTJG William J. Lawrence, D9 OPCEN Controller



On Saturday 27 November 1993 Group Buffalo was SMC for a SAR case involving a sunken barge from the tug CL1. The two persons on the barge were lost when it sank in heavy seas. An extensive search was mounted utilizing a multitude of international assets. One person was recovered (deceased) while the other remains missing. The search was suspended.

A thorough review of the case was conducted to identify lessons learned and to ensure the experience gained by the individuals who worked the case will be passed on to others. Since the allocation of surface assets involved a limited number of resources that required tasking, the primary emphasis was placed on the allocation of air assets.

On Saturday, 27 November 1993 at 0155R Group Buffalo received a MAYDAY call from the tug CL1 stating their barge had sunk with people on board and that their tug was disabled.

Group Buffalo assumed SMC and immediately contacted the OPCEN and RCC Trenton to request air assets. RCC Trenton informed SMC they could provide a C-130 and a CH-113 Labrador (same as CH-46). Since the C-130 would be unable to monitor CH 21 VHF, it was established that all communications with the C-130 would be relayed through the Labrador.

At 0210R Station Oswego's MLB was U/W and had established communications with the CL1. Station Oswego's RHIB also responded along with the merchant vessels JOHN B. AIRD, STEVEN B. ROMAN, CANADIAN RANGER and CAPITAIN REUTOV.

The merchant vessels employed their powerful search lights to illuminate the area. One PIW was recovered at 0256L. The body had no vital signs and was transferred via MLB to an ambulance. Shortly after recovering the PIW, the RHIB was forced to return to the station due to deteriorating weather.

The Canadian C-130 and CH-113 Labrador from Trenton worked together to search the area where the

barge sank. Following their common practice, the C-130 flew at 5,000 feet and deployed illumination flares for the Labrador who was conducting a sector search with night vision goggles at an altitude of 500 feet.

SMC contacted the Onondaga County Sheriff's department to request a helicopter. Originally the Sheriff's helicopter was unable to fly (OOC), but they eventually launched and arrived on scene at 0445R. Prior to arriving on scene, SMC established communications on CH 21 VHF, advised them of the C-130 and Labrador, and assigned them the area east of where the Labrador was searching.

Station Oswego arranged to have a New York State Police helicopter search while the Labrador was refueling. Oswego's OIC made the brief flight with the State helicopter to assess the situation and to direct the MLB to the area with the greatest concentration of debris. SMC was notified and communications were maintained on CH 21 VHF. For the purpose of flight safety, the State helicopter was instructed to depart the scene upon the arrival of the HH-65 and the Labrador at 0831R.

An HH-65 from Air Station Detroit was launched and arrived to conduct the first light search with the Labrador. While both refueled, the HH-65 and Labrador pilots were briefed by SMC and assigned their search areas. Both pilots agreed to a 250 foot vertical separation as they operated in adjacent search areas.

The M/V STEVEN B. ROMAN towed the tug into Oswego harbor after securing from her search effort.

Additional individual sorties were flown by the HH-65, State Police and the Labrador on the 27th, after completion of the first light search, each with negative results.

Active searching was suspended at 271421R NOV after these extensive efforts failed to locate the second PIW.

LESSON: Ninth CG District shore units are unable to communicate directly with the Canadian C-130 aircraft. However, direct comms may be established with the Labrador helicopters on VHF-FM.

DISCUSSION: When working with Canadian fixed-wing aircraft, comms may be worked through RCC Trenton or through rotary-wing aircraft, if employed in the same area.

LESSON: Merchant vessels on the Great Lakes are willing, and able, to assist in SAR cases. However, remember that merchant seamen are relatively inexperienced with regards to search and rescue.

DISCUSSION: During this case, the primary purpose of the merchant vessels was to illuminate the area with their search lights and use their lookouts to search. The M/V lookouts reported "everything" they saw in the water. The smaller SRU's (MLB & RHIB) ended up investigating all of the sightings which distracted them from conducting their assigned search patterns. If possible, employ two small boats so that one can investigate sightings while the other is dedicated to a specific search pattern. This same principle may be applied when using multiple aircraft.

LESSON: Good communications with air assets is essential to ensure proper spacing and separation of aircraft, and to ensure all aircraft know who will respond to various sightings.

DISCUSSION: SMC ensured all aircraft were aware of each other and their tasking by maintaining good communications on CH 21 VHF and by briefing pilots prior to their arrival on scene. This created an effective search even though several different air assets were used simultaneously.

LESSON: SMC should contact U.S. Customs to gain entry approval for Canadian assets needing to take fuel in the U.S. Prior approval to land and get fuel could save valuable minutes in a time critical search.

DISCUSSION: During this case the OPCEN contacted Customs and the servicing airport prior to the Labrador's arrival on scene. This enabled the Labrador to fuel and return to the search area with limited delays. Recent history indicates that RCC Trenton will provide this service for USCG aircraft operating in Canada, upon request.

LESSON: Group Buffalo effectively used the SAR Facilities Guide to identify potential SAR assets for this case.

DISCUSSION: Each Group should review their SAR Facilities Guide to ensure they are up to date and complete. SMC was able to contact the local Sheriff and State Police to get air assets. Knowing their capabilities ahead of time allowed SMC to use them effectively. *o/s*

Facilities Branch Notes

By: G-NRS-2

New Editor of "ON SCENE" Magazine

By: LTJG Jerome A. Popiel

I am the new Editor of ON SCENE magazine. I have just left a fine crew onboard CGC SENECA, where I was a student engineer and damage control assistant. Before SENECA, I graduated with a Bachelor of Science degree in Mathematics and Computer Science from the United States Coast Guard Academy.

I am excited about being part of the Search and Rescue division at Headquarters and particularly pleased to be the Editor of ON SCENE. I am hoping to continue the fine tradition of Coast Guard search and rescue journalism.

One of my goals is to add more breadth to ON SCENE. I would like to hear from units and readers who have never submitted anything to ON SCENE as well as those who regularly make submissions. I am challenging all readers to flood this office with quality articles and photographs. Articles should be worthy of print, however. Routine, non-SAR takes a back seat to current SAR stories.

Hope to hear from you soon!

Editor performing drysuit seasickness test

* * * * *

New Standardization Manual Ready to Roll.....

By: LT Bruce A. McIntosh, Boat Crew Professionalism

The Motor Lifeboat (MLB) & Utility Boat (UTB) Standardization Program Manual, COMDTINST M16114.24, has been completely rewritten and is out to the field. This revision was done after careful evaluation of customer input from the UTB Systems Center, National Motor Life Boat School, and numerous group and station personnel. All the feedback we received was invaluable in producing the finished product.

The Standardization program is a quality management process. The program is designed to ensure boat crew proficiency, safety, and MLB/UTB operational readiness. MLBs and UTBs must be safe, reliable, and properly configured to effectively perform Coast Guard missions. This program is founded on the principal that uniform standards will assure quality and provide a basis for further process improvements. As a result, meeting established standards with a high degree of consistency will ensure program success.

The Motor Lifeboat & Utility Boat Standardization Program Manual also recognizes the importance of program oversight. Measurement of program effectiveness and field unit assessment are key elements of the standardization program. "Ready For Operations" (RFO) evaluations standardize the measurement and assessment process for Standardization Teams (STANTEAMS) and operational and unit commanders.

We hope you will find the new manual helpful in streamlining the process of standardization for Coast Guard boats. Your comments or suggestions for improvement are always encouraged and should be forwarded to Commandant (G-NRS) via the chain of command.

Boat Crew Seamanship Manual

Due to printing problems at the Government Printing Office, a large backorder of the Boat Crew Seamanship Manual developed. We understand that this problem will be resolved soon and that backorders will be filled during May 1994.

We plan to complete the new Boat Crew Seamanship Manual by October 1994. The new manual is being completely revised with updated information and policy guidance. Design concept will emphasize generic boat seamanship skills for entry level crewmember use and qualification. An integral part of our overall goal is the inclusion of risk management methodology throughout the manual, specifically the identification and control of risk in the boat community.

We will not be printing any more Boat Crew Seamanship Manuals until the new version is completed. It is essential that all units order only the minimum amount of manuals that are needed.

If you have any additional questions, contact LT McIntosh at (202) 267-1584.

* * * * *

Boat Allowances

By: LT Wes Driver

Why can't I have another boat allowance? This question is asked almost every day.

Some of you salts may remember in the 80's when requests for boat allowance increases were routinely approved. Today, with decremental budgets and the need to use our resources wisely, allowances are rarely increased. We now scrutinize each allowance change request and approve very few. We also require the disposal of all boats over our authorized allowance.

The Coast Guard has over 650 nonstandard boat allowances afloat and ashore. The typical Rigid Inflatable Boat (RIB) or Utility Boat, Light (UTL) ashore costs about $45,000. The 170 RIBs and UTLs at stations have a replacement cost exceeding $7,500,000. This does not include nonstandard boats at ANTs, MSOs and on cutters. We provide about $950,000 annually for nonstandard boat replacement to the districts, who spend more than $2,000,000.

Typically the request says that acquisition funds are not needed and that a serviceable boat is available. When allowances were approved, a letter requesting additional funds usually followed. Strange that the serviceable boat broke almost immediately and a replacement was required.

A frequent comment on boat allowance change requests is "additional maintenance funds are not required." Wrong! All boats require maintenance. Starting in FY-95 each nonstandard boat allowance will receive Operations and Maintenance (O&M) funds in the district budget model. This will resolve the O&M funding issue.

To reduce the confusion over funding we now consider the life cycle cost of a boat allowance. The life cycle cost of a typical RIBM (Rigid Inflatable Boat, Medium (16' to 21' 11")) is over $14K annually. In the current budget cycle these funds are extremely difficult to find. While we still require the background information, life cycle cost is a primary tool in determining the true annual costs. *o/s*

SAR School Notes

BY: ENS Michael Putlock, G-NRS-1

HELLO!!! For those of you who may not be aware, my name is ENS Michael Putlock, and I am the quota manager for the Maritime SAR Planning course. This is an attempt to start a newsletter that will be used to keep you informed of any information that will effect this course of instruction.

After sitting in this seat for a few months I have developed a list of the most asked questions pertaining to SAR School. Most, if not all of these questions can be answered from various sources of information. I hope this will help you understand the application process for school.

Any changes that occur affecting this course will be published via ON SCENE and message.

Recent developments:

The course of instruction will be shortened one day for non-RCC controllers to allow extra instruction in CASP for RCC controllers.

What is the remaining schedule for this fiscal year?

FY94 REMAINING SAR SCHOOL CONVENINGS

THIRD QUARTER

Convene	Non RCC GRAD	RCC GRAD
11APR94	28APR	29APR
09MAY94	26MAY	28MAY
13JUN94	30JUN	01JUL
FOURTH QUARTER		
01AUG94	18AUG	19AUG
12SEP94	29SEP	30SEP

What qualifies me to attend SAR School?

In order to qualify for resident SAR training at the National Search and Rescue School, you must be presently in or have orders to a SAR planning billet. According to Chapter 1, para C of the Addendum to the National Search and Rescue Manual, only RCC Controllers and Assistant Controllers are required by the Headquarters SAR Program to be graduates of the SAR school. Group OPCEN watchstanders shall complete either the maritime SAR Planning course or the Coast Guard Institute SAR course and a period of on-the-job training. Although the resident course is preferred, it is not always a working option. As suggested on the Addendum, if you are in a planning billet awaiting orders to SAR school we recommended you complete the Institute's course. The address for the Coast Guard Institute is:

U.S. Coast Guard Institute
Surface Operations Branch
P.O. Substation 18
Oklahoma City, OK 73169-6999
Comm Phone (405) 686-4388

We realize that there is no formal SAR classroom training for shipboard personnel, pilots or station personnel. Operational commands may desire these members to receive SAR training. Whenever possible, we fill any excess quotas with these personnel. Recently, however, there has been a cut in training funding, and I doubt there will be room for non-RCC personnel in the classes.

If I qualify, what must I do?

You must fill out a Short-Term Resident Training Request (CG-5223), route it through your chain of command and then mail hard copy to me at Coast Guard Headquarters, attention: ENS Michael Putlock (G-NRS-1). It is also possible to fax the form to me at (202) 267-4418.

Any special considerations can be addressed in block 22. Please add your billet and a brief description of your job in this box. Do not send requests for your unit without knowing who will fill the quota. Please

complete the form correctly. This provides the information needed to assign a priority to the request.

What happens next?

Upon receipt of a training request, I assign a priority to it based on the information provided. Approximately one month prior to the class convening, the requests that fill the highest priority will be selected to attend. There should be a message from TQC about one week later that will give the official class listing, TONO, accounting data, and other instructions. Other information including the most current slate will be available via a phone bulletin board. The phone number for this is: (202) 267-1589.

Is there anything I need to do before reporting to SAR school?

According to the staff at SAR school, all that is required is to read and become familiar with chapters 1, 4, and 11 of the National SAR Manual and chapter 3 in the Coast Guard Addendum to the National SAR Manual.

If I am not in a planning billet, what are my chances of attending SAR school?

We are currently building a database that will be able to historically provide us with these statistics. I can say that aviators, ship drivers and station CO's don't generally get to attend. There simply are not enough quotas. This is an excellent place to show you our quota layout.

Each class has a total of 25 students. This is how the quotas are assigned:

Reserve	1
DOD	3
International Affairs	5
Regular CG	16

Now let's look at some general information that will be helpful to you if selected to attend SAR school.

♦Graduation from SAR school for non-RCC will take place on the third Thursday. Commencement begins at 1030 and the earliest a member should expect to depart from Newport News International airport is 1300 and 1400 from Norfolk International. This allows time for members to check-out of RTC Yorktown. Shortening of the course of instruction allows RCC and JRCC personnel to stay on until the end of the next day for further instruction on CASP. Members staying for the CASP instruction can expect to be available to depart on Friday after 1800 from Newport News and 1900 from Norfolk. If member is unable to arrange transportation that late, they will be allowed to stay at RTC.

♦If you want advanced per diem, you must pick it up before departing unit for SAR school. It is not available at RTC.

♦Quarters are provided at no cost, just bring a copy of your orders. Reservations are automatically made upon issue of orders.

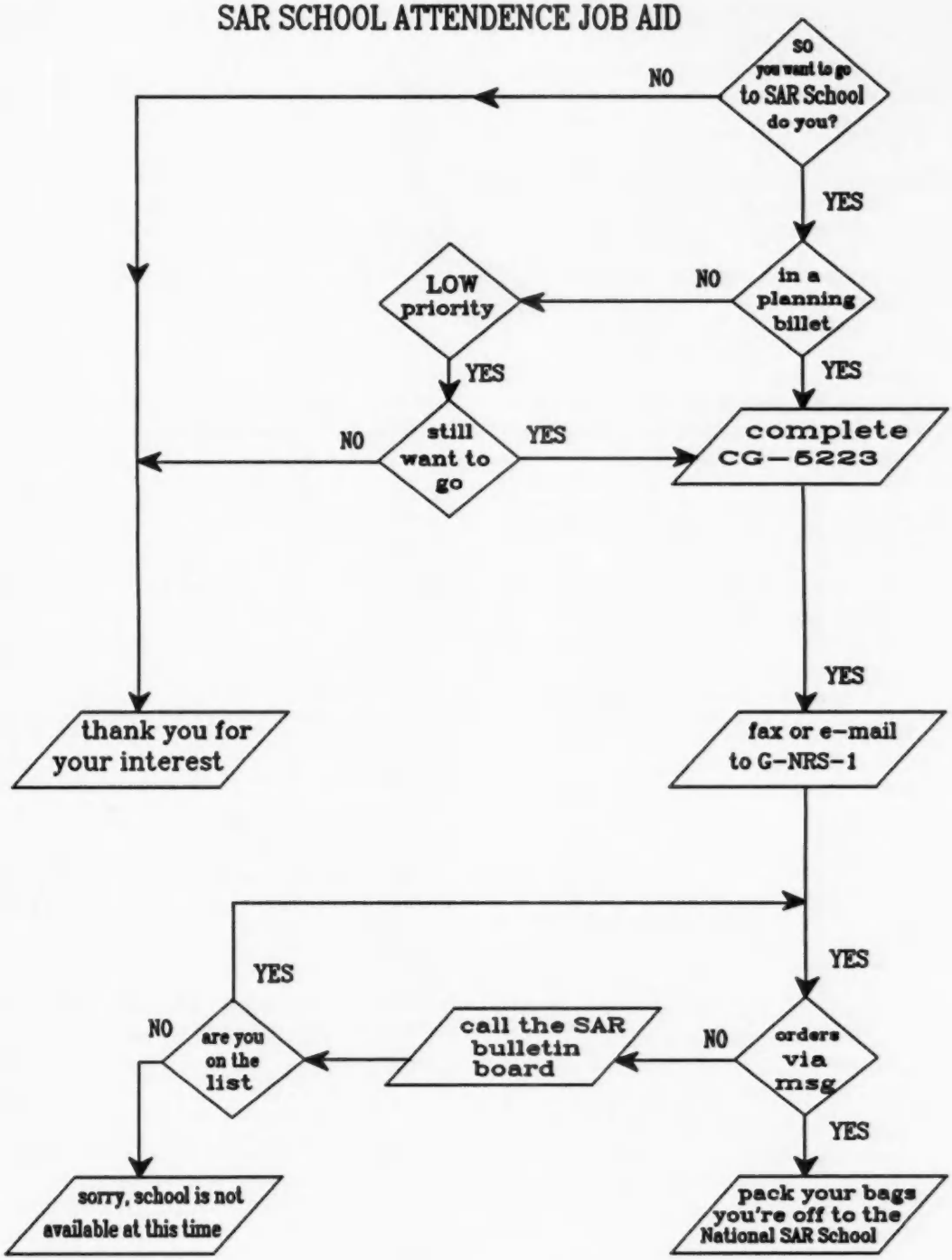
♦Course of instruction is of no cost to you. Districts will fund reserves.

♦Rental vehicles are not authorized on orders.

♦Send any cancellations immediately to me at G-NRS-1.

Any questions or suggestions can be e-mailed to me at ENS M Putlock/G-NRS, or call the SAR Information Bulletin Board at (202) 267-1589. *o/s*

SAR SCHOOL ATTENDENCE JOB AID



SARMIS: New Manuals on the Way

BY: ENS T. COOPER, G-NRS-1

As many of you have noticed, the current version of the Search And Rescue Management Information System Manual (COMDTINST M5230.10A) has just about outlived its usefulness.

There are several problems with the manual that we hope to correct:

PROBLEM: The current manual contains both policy and procedures. This is not the preferred method because any small procedure change requires a complicated rewrite and approval process to the entire manual. The manual is also intimidating because it contains so much information that it seldom gets picked up.

FIX: SARMIS policy has just been rewritten and will be incorporated in the next version of the CG Addendum, due out later this year. Two separate users manuals (one for DES, one for DSS) will be written to reflect only what is necessary for the operator of that particular sub-system to know. This will reduce the size of the manuals considerably and hopefully allow them to become more useful.

PROBLEM: Cutters are not on the distribution for the current manual. Because they are not usually involved with a significant number of SAR cases, they are generally not familiar with the procedures. Not having a manual available may delay their report submission.

FIX: Include all SARMIS DES/DSS users on the distribution. They are currently on the distribution for the CG Addendum and will be receiving the new edition due out later this year.

PROBLEM: The current manual is not clearly written. It does not flow logically and contains a lot of repetition. This creates confusion and frustration when trying to find answers.

FIX: Rewrite the manual from a user's standpoint, not a technical expert's!

PROBLEM: New versions of DES and DSS have been distributed since this manual was written, leaving much of the information outdated.

FIX: Update the information, including the new codes and check for accuracy.

Sounds pretty easy. What I need from you is: ideas or information that you would like to see added, information that you would like to see deleted because it is no longer useful, and any other suggestions you might have. When the manuals are completed, I plan to have users of both DES and DSS look it over and provide me with their comments. Ideally, I would like to have two sets of users doing the review: those who are very familiar with the software and those who are completely new to SARMIS.

If you are interested in providing feedback for our new user's manuals, please send your suggestions to:

Commandant (G-NRS-1)
USCG Headquarters
2100 Second Street SW
Washington, DC 20593-0001

ATTN: ENS Tracey Cooper

A future article will address what the Search and Rescue Program Branch has been doing to fix the SARMIS system. *o/s*

Assessment Analysis of 44' MLB Standardization Team Visits

By: CWO W. J. Ham, Jr., NMLBS

Problems in the small boat community, at least in the MLB, community are well documented. Standardization team reports, since the creation of the team, have indicated some improvements in standardized configuration and operations. The implementation of the Ready for Operations (RFO) program, MLB supervisors course and the standardization visit program are some of the factors responsible for the improvements. The standardization program is having some success, but there are still engineering, maintenance and support problems within the MLB community that have been identified as significant deficiencies requiring attention. The 44' MLB is a 30 year old resource that has for the most part been neglected. The question is, what can be done to make improvements. With the next generation of lifeboat coming on line, it is imperative that we identify and change attitudes, procedures and organization so that the new lifeboat will last its predicted service life and that we minimize the cost of maintenance and repair. The areas that need improvement are ideal problems for TQM methods and should be examined using its tools. Some of the areas that need to be examined are:

a. Engineering and Maintenance Support Organization. The Naval Engineering Manual outlines a small boat maintenance support organization that exists, for the most part, only on paper. In reality there are few districts (if any) that use this organizational outline. The methods and philosophy of maintenance and repair vary widely and do not conform to a Coast Guard-wide standard. This is true from the MLC to the unit levels. To institutionalize a maintenance and repair standard we need to standardize organizational responsibilities and we must adhere to them at all levels.

b. Operational and Program Management Oversight. The Coast Guard's most recent reorganization disestablished the district inspection program and replaced it with various oversight programs under the management of MLCs. It should be noted that the two MLC small boat programs are quite different. This, in effect, removed an evaluation tool from the districts' management process and placed it at a level that is further removed (physically and responsibility wise) from both group and unit.

It also moved some of the oversight responsibility downward to the group level, without providing additional personnel or a standard program to follow. The implementation of the boat RFO program provided both groups and units a tool for measurement against Coast Guard standards but made its implementation a matter of individual choice. Therefore, it is not SOP throughout the Coast Guard. The next iteration of the RFO instruction is a mandatory program and would improve standardization in the area of boat operations. The MLB Supervisors Course additionally provides some measure of standardization at the RFO evaluator's level. This course should be mandatory training for RFO evaluators. Finally, both MLC boat programs should be identical.

c. Funding. The disparity of funding management of boat programs, at all levels, is a major hindrance to boat standards in configuration and maintenance levels. How money is distributed and spent after it reaches the district level is a major cause of the slow movement towards boat standardization. Funds targeted to small boat programs should be strictly obligated to the program and should be tracked to insure they are. The ability of fund managers to place these funds where they see fit, not only hurts the customer (multimission station) but also makes it impossible to formulate realistic budget plans and ultimately leads to crisis management. This idea may be thought of as micromanagement, but it is the customer we are trying to please, isn't it?

d. Training. The Coast Guard Station Staffing Study of 1991 identified training as a significant burden on stations throughout the Coast Guard. Station training in the area of boat crew qualification is a large part of this burden. The present Boat Training Program relies to a great extent on unit abilities to conduct the training. Although the program sets minimum requirements for crewmember qualification, some of the tasks are generic and open to individual

interpretation. The individual's level of proficiency in each qualification task is also subjective. The station's boat training program success is also dependent on the unit's ability to properly instruct. Senior station personnel may be very proficient and experienced in small boat operations, but may be less than ideal instructors. The station's work load, and other internal and external factors that make up the day-to-day business of the unit also dictate the extent and quality of crewmember training. All of these factors lead to inequality of training from station to station. Therefore, the ideals of standardized instruction and operational procedures throughout the Coast Guard are not realized.

This lack of standards is true in all levels of qualification, but is particularly significant in the qualification of coxswains. Coxswains are the cornerstone of boat operations. Their expertise and knowledge is primarily responsible for the safety, and success or failure of any boat mission. The only way to insure that the coxswains' knowledge base and ability to operate boats are uniform Coast Guard wide is through standardized, formal training. The training should be conducted by professional instructors in an atmosphere free from distractions typically found at a station. This would mean a new coxswain school being established which would bring an inexperienced individual to a fully qualified level in all standard and generic nonstandard boat types. This would take a significant work load off the station and insure that coxswains have the same level of knowledge and basic skills throughout the Coast Guard. Specialized training, such as surfman, or other localized unique qualifications, could then been given immediate and concentrated attention at the unit or at other specialized training facilities, such as the National Motor Lifeboat School. This suggestion could, and probably should, be taken a step further with implementation of a boat crewman and engineers courses of instruction. These would also reduce the station's training workload.

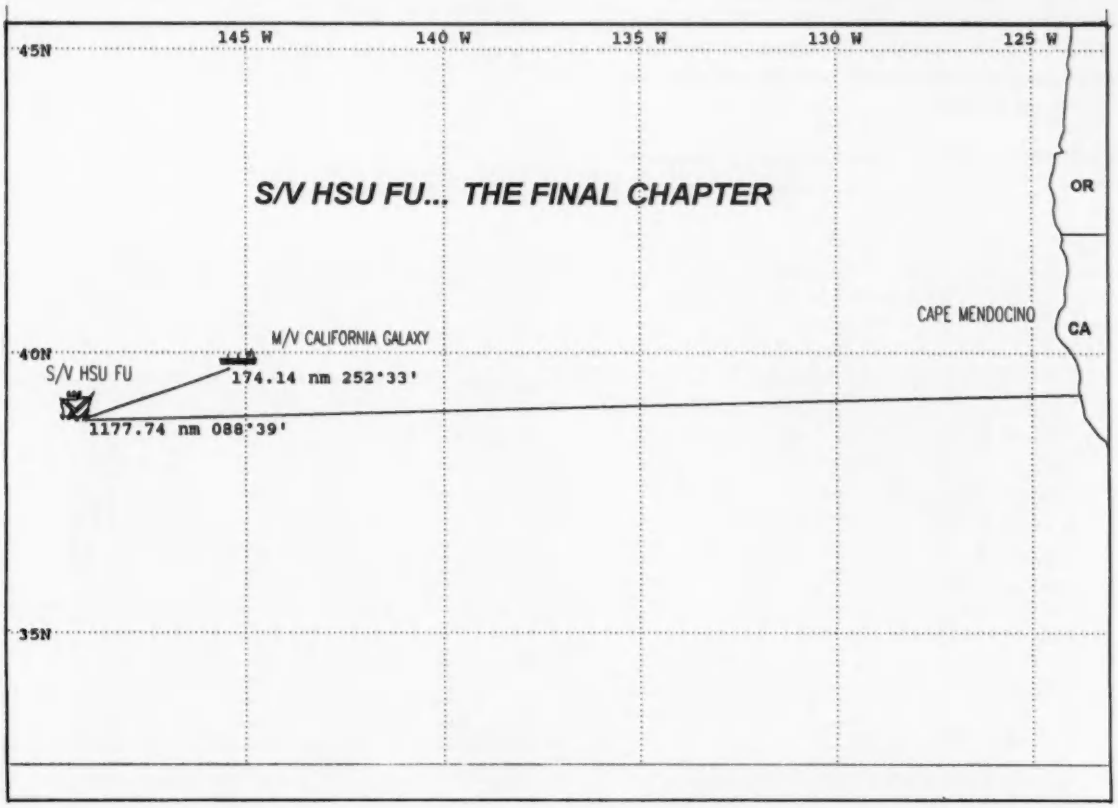
e. Boat Program Organization. A significant increase in the professionalism within the boat community can only be accomplished by a radical change in the organization. As with any program in the Coast Guard, those that get wide spread attention are those that are promoted from the highest levels of Coast Guard leadership. The Commandant's priorities become everyone's priorities in short order. We have seen this happen in the recent past with the TQM and Work Life initiatives. The relative success in the promotion and implementation of these initiatives gives a good indication of what it takes to make a program work and get things done. The factors needed are consistent program promotion from a high level, adequate staffing, and funding to provide the tools.

The present boat program is not a single entity. It is in fact a collection of programs run by G-NRS, G-ENE, G-PRF and to a lesser extent other branches and divisions. Each has individual responsibilities, with varying degrees of dedication to the small boat community, and are dependent on other programs that take their toll on time and effort. This organization scatters program ownership and responsibility over a wide area. It is not the most efficient way of getting things done.

My thoughts on reorganization would place individuals from each of these divisions under one roof, and with one focus, to run the boat program. This would place a senior officer in charge, giving the program a high profile advocate with a voice dedicated to the boat community. Additional benefits would be the elimination of divisional "turf" battles and protectionist attitudes that sometimes bogs down the system to the detriment of the program, and the maintenance of the program's goals and direction within this organizational element, without regard to personnel changes. This is not the present case. A single personnel change within the present organization often has a dramatic impact on direction and focus. I believe that unless some kind of organizational change is made, which brings all the guns to bear under one leader, true professionalism and standardization will never be realized, and we will continue to plod along, just getting by.

I have given suggestions that do not consider where personnel or funding would come from. I also realize that an organizational change which includes resource deletion within the divisions and relocation of money and power, will not be a popular idea among those that have the resources, money and power. Nevertheless, I hope someone will look closely at how we do things and consider these or other changes that will improve and help the boat community. There are excellent individual programs throughout the small boat organization. We should look closely at these and adopt what works for the rest of the Coast Guard. The people who operate and maintain our boats deserve nothing less than the best we can give them. We have come along way from the days of oar and leadline to today's turbocharged diesel engines and electronic navigation aids, the boat organization must not only catch up to today, but also be prepared for the future.
o/s

Search and Rescue Highlights



HSU FU Update

On 15 November 1993, less than a month after USCGC JARVIS' encounter, the S/V HSU FU again contacted the Coast Guard. The crew of the vessel had decided that using the synthetic lines provided by the JARVIS would jeopardize the historical accuracy of their voyage. The master's initial report was that he was concerned the vessel would not make it to the west coast of North America. He did not request any assistance (yet). The vessel was 1350NM west of Cape Mendocino, CA. The following day, the master decided that the rattan lashings would not last much longer, and requested that he and his crew be taken off the vessel. The 11th District RCC queried AMVER and located the Japanese container ship CALIFORNIA GALAXY, enroute Tokyo, 170 nautical miles northeast of the vessel. On the evening of the 17th all five crewmen from the HSU FU were picked up by the CALIFORNIA GALAXY. The master of the HSU FU doubted that the vessel would stay afloat through the night. The crew remained on the container ship until it docked in Tokyo on November 24. The bamboo raft will likely end up as many of its historical predecessors: various odd bits of driftwood scattered along the west coast of North America.

Submitted by LT Mike White, D11 Command Center

CGAS Sacramento's contribution: We were launched on the SAR case from a flight training mission to assist the sinking vessel. The crew was rescued by a Japanese freighter right after dark (date unremembered) and the HSU FU was cast adrift, left to its own devices. We talked to the skipper and he seemed happy to be safe, but sad to leave his vessel.

Submitted by AMCS R. H. Biegel, CGAS Sacramento
o/s

Hoax Caller Prosecuted

This winter marked a milestone for prosecution of hoax callers. A New Bedford, Massachusetts man was the first person in U. S. history to be sentenced to prison for transmitting a phony distress call. He was caught still holding the transmitter in February, 1991. This prosecution was made possible by the passage of the Studds Act in 1990.

The Studds Act makes false emergency transmissions to the Coast Guard a felony. This is punishable up to six years in prison, $250,000 in criminal penalties and $5000 in civil penalties.

This should send a message to would-be pranksters that "hoax is no jokes."

The hotline number to report hoax callers:

1-800-2NO-HOAX *o/s*

Winter ice operations by Station Rochester

ON THE S.A.R. SCENE . . .

Rescue and Survival Systems Notes

By: CWO Mark O. Hyde, G-NRS-2

GENTLEMEN, START YOUR ENGINES!

The race has begun, nobody can beat me out the doors of HQ. This will be the last article from me as I am leaving my little hole here for a "*Northwest Paradise*". I know there are many things to be done to improve the rescue and survival equipment you use, but, I will leave that in the most capable hands of my replacement, CWO Rich Todd. He is a much better person than I am. Please call him and welcome him aboard.

Now is the time for all you wizards that sent in those excellent Idea Expresses that I disapproved, to resubmit them for the new blood. All kidding aside, I'm glad to be leaving, because I am at the stage of HQ burnout. I hope that I did you and your unit some good while I was here.

The future of Coast Guard rescue and survival brings new advanced droppable pumps, comfortable dry suits, and automatic inflatable life vests for cutter and small boat crews. These changes should happen in the next four years.

Survival is the farthest thing in most peoples mind until they are placed in a distress situation. Fortunately that does not happen often. The conceived lack of placing our people at risk mind-set is also why funding for proper survival equipment is difficult to obtain. Be safe and do all the precautions you are trained in to minimize your risk.

As I leave my job here I will miss the opportunity of meeting many fine "Coasties". I am glad to have jumped in the water, drove boats, and tipped a beer with many of you. THANKS!

SURVIVAL FISHING KIT

In my relentless search of the National Stock System for survival items I came across a new survival fishing kit. This kit is designed to catch fish even if the survivor has never before held a fishing pole. It utilizes what the manufacturer calls a speedhook, a spring-loaded device that activates when the fish takes the provided freeze-dried bait in its mouth. The National Stock Number for the Speedhook fishing device/snare is 4220-01-379-5598

NEW STROBE LIGHT

Are you tired of ordering the hazardous waste, mercury filled, usually expired SDU-5E strobe light batteries from the stock system? Don't feel alone. It is another one of those frustrating things that can happen on the worst days. Well, now there is an alternative. A strobe light has been developed that performs better than the SDU-5E and uses three AA Batteries.

This light has taken over two years to develop and it seems to be a marked improvement over anything I have seen. Another benefit of this light is it costs less than the SDU-5E. I am attempting to place it in the National Stock System. In the interim you may order it from Lifesaving Systems at (813) 645-2748, specify P/N 310.

BOAT CREW GLASSES

One of the boat crew protection items that is often over looked is eye protection. This is due to a number of things including style, comfort, protection, and availability. I attended a National Safety Council conference and looked at hundreds of manufacturers' and distributors eye safety protection. At the conference I was practically impressed with the Crews ZX safety glasses.

The Crews ZX glasses feature a wrap around design for high–visibility, a scratch resistant lens, adjustable spatula or cable temples, and two nosebridges for fit. You also receive a storage bag. All this for less than nine bucks.

These glasses are available from Lab Safety Supply at (800) 356–0783 Specify WA–18480 Clear lens or WA–18481 Gray lens. We recommend blue frames to be consistent throughout the Coast Guard.

If you put safety straps on these glasses they are acceptable for helicopter operations. Imprinted navy blue Coast Guard Boat Crew––eyewear safety straps are available from Chums at (800) 222–2486.

STAIRWAY TO HEAVEN

Man–Overboard System, Rescue Ramp, or Inflatable Recovery Systems are some of the names I have heard it called. I call it the stairway to heaven because this is the best recovery method ever developed to recover many survivors from a major marine accident or even one 250–pound fisherman.

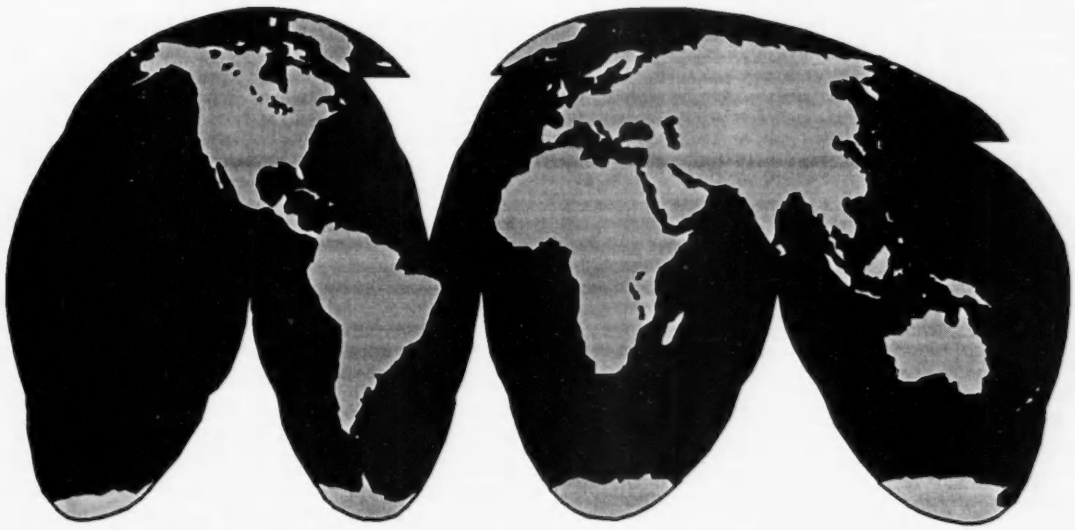
This inflatable device has been tested throughout the Coast Guard and has received outstanding marks. The best part of it is, your small boat unit is soon to receive its own!!! I have funded your district to purchase one of these units for every small boat station.

At a recent survival equipment brief, the Commandant stated "This device only costs the same as one standard terminal, the Coast Guard needs this." I agree fully. This device will save lives.

Please submit an article to Editor, ON SCENE when you record your first save with the "Stairway To Heaven" and we will publish it. The writer of the best save or article submitted will win a survival gift. *o/s*

GMDSS – The U.S. Experience

By: Mr. Joe Horsey, G-TTM-2



***Editor's Note:** Some readers may presume that this article is written exclusively for the technically minded. Everyone in the SAR community should be aware of the technological changes that are on the horizon. At a minimum, those not technically oriented should at least read the section on digital selective calling and recreational and fishing vessels. At this stage in planning, the 47' MLB is expected to have a DSC-FM. By the way, when we get the "standard" direction finder (DF), all our large standard boats (MLBs and UTBs) will have the capability to home in on the class "C" EPIRB 121.5 homing beacon.*

Part two of this article will be included in the next issue of ON SCENE.

There has been much discussion about the Global Maritime Distress and Safety System (GMDSS), including talk about its implementation status, concerns about false alarms, views of radio manufacturers, need for GMDSS training, and Inmarsat developments. This two-part article discusses the following issues:

1. The status of GMDSS implementation within the U.S.

2. Bringing recreational, fishing and other vessels into GMDSS

3. What happens when ships stop guarding VHF channel 16?;

4. Other GMDSS problems needing an urgent solution

5. How coming changes in satellite communications will affect GMDSS?

The Status of GMDSS Implementation in the U.S.

Regulatory: The Federal Communications Commission has issued regulations requiring U.S. flag vessels incorporate GMDSS, but Congress has not yet amended the statutes which require U.S. vessels to carry Morse telegraphy equipment and radio officers. Congress has, however, recently begun to look at changing these statutes.

Shore side implementation: The Coast Guard operates most of the terrestrial radio stations used for maritime distress and safety. COMSAT and IDB Mobile operate the U.S. Inmarsat coast earth stations participating in GMDSS, and the National Oceanic and Atmospheric Administration (NOAA) operates the TIROS and

GOES satellites and associated earth stations used to detect 406 MHz emergency position-indicating radiobeacon (EPIRB) alerts.

Inmarsat-A. Inmarsat-A satellite ship earth stations are currently the most common type of satellite equipment on ships, providing voice and telex capability. COMSAT and IDB Mobile both operate Inmarsat A coast earth stations in the U.S. Priority 03 (distress) alerts are routed to either the Coast Guard Atlantic or Pacific Area Operations Center, as appropriate. All Inmarsat telex calls to the Coast Guard now, including distress calls, are routed over Easylink, a store and forward data circuit. Although priority is lost once the call leaves the coast earth station for the Coast Guard, our Area communications centers are aware that the circuit is being used for distress, and is looking out for such messages. However, telex distress messages routed for some District rescue coordination centers (RCCs) may not receive the same care. We eventually intend to connect such messages to our internal X.25 Coast Guard Data Network, where priority control can be better maintained. We also will consider recognizing messages of urgency and safety priority (priorities 02 and 01) if a need arises. We currently issue urgent marine information broadcasts over Inmarsat-A telex all-ships call, and will do so until Inmarsat SafetyNET becomes fully implemented.

Inmarsat-B. Inmarsat-B satellite ship earth stations provided service similar to the "A" terminal, but at less cost. It is the designated replacement for the "A". Both COMSAT and IDB Mobile plan to offer Inmarsat-B services in the U.S., once systems become available. Inmarsat-B GMDSS services should be similar to those of Inmarsat-A.

Inmarsat-C and SafetyNET. Inmarsat-C is a small, personal computer-based, telex-only satellite terminal. It is also the means designated by the International Maritime Organization (IMO) for receiving high seas maritime safety information. COMSAT has offered an Inmarsat-C service with SafetyNET for the last two years. Distress messages are being routed to the Coast Guard Pacific Area operations center over our Coast Guard Data Net, and will soon be routed to our Atlantic operations center the same way. SafetyNET messages are routed to COMSAT over this same data net. SafetyNET is fully operational in the U.S. over the Pacific Ocean Region and the Atlantic Ocean Region - West, providing NAVAREA IV and XII messages, weather warnings and forecasts, SAR urgent marine information broadcasts, and International Ice Patrol broadcasts. COMSAT expects to be operational over Atlantic Ocean Region - East soon.

HF radiotelex (narrowband direct printing, also called SITOR). This is the means designated by IMO for sending message safety traffic over radio. The Coast Guard has installed automatic radiotelex equipment at its communications stations in Portsmouth VA, San Francisco CA, Kodiak AK, Honolulu HI, and Guam. The Coast Guard accepts safety reports, AMVER reports, fishing vessel reports, meteorological reports, and distress and urgency traffic (+URG) all at no cost to the mariner. Last September we began remoting Guam's radiotelex service from our station in San Francisco, and we plan to remote other communication stations as well. Landline and other problems have disrupted our service from Guam since then, but we are working to correct this problem before we remote other stations.

NAVTEX. NAVTEX is the means designated by IMO for sending coastal maritime safety information to ships, in text format. It is broadcast from Coast Guard communications stations and sections. The Coast Guard began operating NAVTEX from Boston in 1983, and completed its last installation in Adak Alaska just in time to meet IMO's August 1993 carriage requirement. NAVTEX coverage is reasonably continuous along the U.S. east, west and Gulf coasts, as well south of Alaska and the area around Guam and Puerto Rico. We have no coverage in the Great Lakes, though we understand Canada is considering installing NAVTEX there. Since we have only installed NAVTEX at sites where Morse telegraphy transmissions were made previously, propagation analyses show that we apparently have several coverage gaps, particularly in the southeast U.S., Guam and Puerto Rico. NAVTEX and Inmarsat C SafetyNET are the two primary systems designated by IMO for transmitting urgent marine information broadcasts to ships.

HF NAVTEX. The Coast Guard broadcasts HF NAVTEX broadcasts of high seas weather forecasts, NAVAREA IV and XII warnings, and TIROS N satellite orbit information from Boston, MA, Honolulu, HI, Guam and San Francisco, CA. We are also temporarily broadcasting worldwide navigational warnings (called HYDROLANT and HYDROPAC). IMO has designated HF NAVTEX as an equivalent (secondary) system to Inmarsat C SafetyNET.

Digital selective calling (DSC). DSC is a data protocol used to initiate maritime radio communications and send distress alerts. It's designed to be used with and be part of a standard HF or VHF maritime radio. DSC is the last GMDSS element to be installed. We operate an

MF/HF DSC service from our communication station in Boston (003669991), and have just opened a MF/VHF DSC trial operational service from our Group Moriches (Long Island) New York (003669985). We plan to begin HF DSC safety service from each of our communications stations next year, and to have an MF and VHF DSC capability for most of the U.S. coastal areas by the full implementation of the GMDSS in 1999. We are already funded to install MF and HF DSC, but have deferred funding VHF DSC until 1996.

406 MHz EPIRBs. NOAA operates the U.S. Mission Control Center (USMCC) and satellite local user terminals used for receipt of 406 MHz EPIRB alerts. All U.S. 406 MHz EPIRBs are serially encoded, and registered at the USMCC. When an EPIRB alert is received, the USMCC prepares an alert message which includes registration information, and routes it to the appropriate RCC based upon the EPIRB location. EPIRB registration is currently optional with compliance at about 70%, but we expect it to be made mandatory shortly.

Inmarsat EPIRBs. IDB Mobile hosts an Inmarsat EPIRB processor at its coast earth station in Niles Canyon CA, operating both in the Pacific Ocean Region and the Atlantic Ocean Region – West. Distress alerts are routed over a special data circuit directly to our Atlantic and Pacific Communications Center. Although we have not yet declared the system operational, it is in fact operating. IMO has designated Inmarsat EPIRBs as an equivalent system to 406 MHz EPIRBs, but few such EPIRBs are actually in use.

Automated maritime safety broadcasts. The Coast Guard is using GMDSS as an opportunity to integrate and automate most of our high seas radio broadcasts. Messages can be created at computer terminals throughout the Coast Guard, National Weather Service and Defense Mapping Agency, and routed over the Coast Guard Data Net to COMSAT for broadcast over Inmarsat SafetyNET, or to our communication stations' automatic message scheduler for broadcast over NAVTEX or HF radiotelephone synthesized voice, without any human message handling or intervention. I can prepare a message on my office computer and by inserting the proper headers, put the message on the air, either immediately or on a schedule, over any or all of these circuits. The Coast Guard Telecommunications and Information Systems Command won a Federal Leadership Award for developing this system and putting it into place.

Discontinued services. On August first of last year, we discontinued Morse telegraphy watchkeeping on 500 kHz, as well as Morse broadcasting of safety information in that band. We plan to contract out our HF Morse telegraphy service next year, and will discontinue HF Morse broadcasts of safety information soon. We plan to discontinue watchkeeping on 2182 kHz, HF radiotelephone channels, and VHF channel 16 as soon after 1999 as we can without affecting maritime safety, although we realize channel 16 watchkeeping may have to continue a few years beyond full GMDSS implementation.

Bringing recreational, fishing and other vessels into the GMDSS.

When IMO implemented GMDSS in 1988, the regulations they adopted only covered ships subject to the SOLAS Convention (primarily cargo and passenger ships on international voyages). To allow ships time to implement the GMDSS, IMO provided a transition period, requiring GMDSS ships to continue to guard VHF channel 16 and 2182 kHz until February 1, 1999. This transitional function (SOLAS ships continued guard of VHF ch16 and 2182 kHz) also works to bridge SOLAS and non-SOLAS ship communications. Cargo ships often receive distress calls from yachtsmen and fishermen far from shore, relay those calls to a RCC, and go to the aid of those persons in distress when they can respond quicker than the RCC can dispatch resources.

Many search and rescue authorities are operating two maritime distress and safety systems, one for SOLAS GMDSS ships, and another for non-SOLAS ships. We, as a rescue agency, cannot afford to do so. In fact, GMDSS was sold in the U.S. as a way of being more efficient, reducing resources, taking the "search" out of search & rescue.

What happens when SOLAS ships cease guarding VHF channel 16 in 1999? What will the fisherman do, when he sees a cargo ship bearing down on him at night? How many GMDSS-equipped ships have decided to turn off their VHF channel 16 watch receiver today? One of our rescue coordination centers recently instructed a disabled yachtsman off the coast of Mexico to release a flare, to get a nearby passenger vessel to turn its VHF radio on. Another charter boat sank after missing a storm warning broadcast; the radio apparently was on, but tuned to the wrong channel.

Neither we nor IMO has the authority to require radio-equipped recreational vessels carry GMDSS equipment, nor would we be successful in requiring commercial fishermen carry GMDSS equipment. We considered asking IMO to rescind the SOLAS provision allowing ships to discontinue their 2182 kHz and VHF channel

16 watch after 1999, but realize that proposal would face considerable opposition. Even if we were successful, we'd have difficulty enforcing such a watchkeeping requirement. We have difficulty enforcing it now.

However, if we cannot require all ships carry GMDSS equipment, we can require manufacturers of maritime radio equipment include a GMDSS capability. We asked the Radio Technical Commission for Maritime Services (RTCM) to develop a low-cost standard for digital selective calling, limited to about 15% of the radio's retail cost. RTCM did this, and a year and a half ago, the Coast Guard petitioned the U.S. Federal Communications Commission to require all marine radios sold in the U.S. after 1997 to have such a DSC capability. The FCC is still studying the matter, and expects to release a notice of proposed rulemaking soon on this soon. While this may not totally solve the problem (used radios without DSC could still be sold), it would help alleviate it.

The International Telecommunications Union Sector for Radiocommunications (old CCIR) picked up this problem as well, and adopted three new classes of DSC. Two of them, the Class D and the Class E, are very similar to the RTCM standard for intended for non-SOLAS vessels. These lower-cost versions of DSC can send and receive routine, safety, urgency and distress individual calls, and all-ship calls.

If marine radios have a DSC capability, then the problem of communications incompatibility between SOLAS and non-SOLAS vessels should mostly be resolved; but, we better have resolved the procedural problems we now face with DSC. *o/s*

SARMIS Data Requests

By: Ms. Sue Holden, G-NRS-1

As the summer SAR season approaches once again, we will be seeking photographs for the 1994 edition of the SAR Statistics. Since I can't get out there to take the action shots myself, I really have to depend heavily on field units for photos needed to make the publication a more interesting product. If you come across an interesting photo, send it to me with a short description of the case and name of the photographer, if known.

Requests for data should be rapidraft, letter or e-mail directed to Commandant (G-NRS-1), outlining your request in detail. Please include a name and phone number in case there are questions concerning your request. If you are not sure that we can provide what you need, give me a call at FTS 267-1089. I can be reached from 7 a.m. to 3:30 p.m. EST.

Please allow a reasonable amount of time for us to respond to your request. One to two weeks is all that is required for a typical request. However, there are times when special projects may lengthen the time needed to fill your request. When you have a general idea of the type of information needed, give me a call, and we can discuss the best way to depict the data.

NOTE: Members should direct private citizens seeking SAR information to forward their requests under the Freedom of Information Act. Procedures for submitting these requests are contained in the Privacy and Freedom of Information Acts Manual (COMDTINST M5260.2). *o/s*

Mayday Mayday

By: G. Doerffel, IPDCP XIII, 7th

In a MAYDAY situation, there is specific information necessary to efficiently and successfully execute a Search and Rescue effort. In the height of a calamity, excitement runs high and many times normally rational people becomes so confused, they can't even remember their own names or other important information.

If you were in a MAYDAY situation, think of what James Bond might do and communicate to Search and Rescue personnel. He would first compose himself and think of the acronym "I SPI" and then transmit the following information:

I–Identify: Who you are and how many persons on board

S–Situation: What type of MAYDAY is it, sinking, fire, etc.

P–Position: Give position in Lat/Long, TD's, bearings, or other geographical location.

I–Intention: Tell what you plan to do, such as abandon ship, man life boats, go overboard with life jackets, etc.

The "I SPI" is important need to know information. Additional information is nice to know but not essential. Let's educate the public to act in an emergency situation as James Bond would. Remember, "I SPI". *o/s*

Radio Watch Requirement

By: Mr. Joe Hersey, G–TTM–2

Federal Communications Commission regulations require that ALL vessels required to carry a VHF marine radio MUST maintain a radio watch on channel 16 (156.8 MHz), except under specific circumstances, while the vessel is underway (47 C.F.R. 80.148). These include all U.S. uninspected commercial fishing vessels, fish processing vessels and fish tender vessels that operate beyond the Boundary Lines or that operate with more than 16 individuals on board. Even boaters are required to monitor VHF channel 16 (or channel 9) whenever the radio is turned on.

The purpose of this regulation is twofold. First, it helps ensure that calls from a vessel in distress will be received by ships which may be in position to give immediate assistance. Second, it helps ensure that storm warnings and other urgent marine information broadcasts are received. The Coast Guard announces these broadcasts on VHF channel 16.

Mariners should be advised of this safety requirement when opportunities arise. It's also appropriate and recommended that the Coast Guard file a radio violation report in accordance with Chapter 5 of COMDTINST M2400.1F if a mariner does not comply. *o/s*

CG Auxiliary Boat Crew Manual

By: CDR T. Martin, G-NAB

There is a revised Auxiliary Boat Crew Manual (COMDTINST M16798.27) coming out this summer and there are a couple of significant changes in the manual to report. First and foremost is the title. It is now called the Auxiliary Boat Crew Seamanship Manual. The name of the Boat Crew Manual was changed because G-NRS-2 is in the early stages of working with the Auxiliary Operations Branch (G-NAB-2) at headquarters to develop a single boat crew seamanship manual for use by everyone involved in Coast Guard afloat operations – the active duty and reserve as well as those in the Auxiliary. The other big change in the new manual is that it is no longer divided into five volumes with chapters in each volume. It now contains only chapters – 22 of them to be exact. The new manual is 534 pages long, over 250 pages less than the current manual. During the revision process, a greater reduction in the number of pages was purposely given up to ensure that illustrations were appropriate in size and number. This should make the text better and the whole manual more valuable in general. Once printed, the manual will be distributed to field units, districts, and areas. It will also be stocked at the Auxiliary National Supply Center (ANSC) for further distribution to Auxiliarists working in operations. However, the stock of the current manual was replenished last summer. ANSC will continue to issue the old manual until the stock is depleted, at which time they will begin issuing the new manual. The old manual is still a very useful publication and contains current operational procedures for use in afloat operations. *o/s*

Patrolling Cleveland Harbor

NOW, Search and Rescue departing!

In wrapping up an even century since my grandfather signed on as a surfman, I retire with strong feelings of pride and regret.

The pride comes from seeing good and great things done by people I admire. Some I admire because of their skill; some for their dedication, and others for how far they've come in acquiring both. I stand in awe of our young petty officers' breadth of knowledge and dedication to their units. I marvel at the willingness of our volunteer Auxiliarists to put on a uniform and go out in the dark and stormy night to rescue a boater or to teach yet one more class of boating neophytes how to avoid becoming that other boater – all for gas and skimpy sandwich money. My chest feels the fullest when someone I've known has overcome challenges (through experience, maturity, bravery, understanding, or empathy) and succeeded in moving the Coast Guard, their unit and themselves up the path of success. I've known fine young people as seamen and JO's who are now Chiefs, Master Chiefs, properly salty Warrants, Captains and Admirals.

I've been around, and had the privilege of learning from, some of the nicest, loudest, quietest, toughest, smoothest, roughest, strongest, most effective, most brash, most talented, most caring, most understanding, smartest folks ever to draw a check from the U.S. Treasury. The opposites were there also, of course, and I learned nearly as much from that crowd.

The Search and Rescue mission itself has always been a source of pride and an anchor to windward for me throughout my career. Scratch most Coasties and I'll bet they bleed international orange, too. In the next few years, the SAR program has a chance to become what we all feel it should be --- the best in the world. Much needs to be done to make this happen. New boats have to be brought on line expeditiously and with the users the top consideration. Improvements in the response planning process must continue as the SMC toolkit gets aboard the information superhighway. Our international connections have to be recemented for mutual support into the next century. Training must expand and refocus on consistent quality -- coast to coast, messdeck to wardroom. Leaders have to get out from under the top-down tasking, and out from behind the desk. They must get out front and actually lead ----- no sea cabin OINC's/CO's need apply!

Captain Mike McCormack, my replacement, is well up to the challenge of moving the program forward. His surface and aviation operational background includes SAR duty in some of the harshest climates in this country. He is a "SAR Dog" of the first order!!

The regret I feel is in leaving the fine people who've shared so much and in leaving important work for others that I would have preferred to handle myself. Sounds just like most assignments, doesn't it? Well, this assignment was 31 years short. 31 years of wonder, growth, and pride. Thank you all who made it so.

Semper Paratus!

Captain Michael Cowan

Now....Search and Rescue ashore!

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The deadline for submitting articles to appear in the next issue of ON SCENE is ***01 July 94****. Please try to keep them under three pages if at all possible. If you submit an article for publication and have it typed on the CG standard terminal, it will save us typing time. Copy the submission on a 5-1/4" floppy disk and mail it with a printed copy. E-mail with a document designer attachment is also acceptable.* ***Pictures are most welcome.*** *Please tell us if you wish the disk to be returned. Arrangements can also be made to accept articles over a modem.*

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